Secondary Research Report on Food Security and the Private Sector in The Greater Horn of Africa

Final Report

December 1995

Not for quotation, reproduction, or distribution

Prepared for
United States Agency for International Development
Bureau for Africa
Office of Sustainable Development
Productive Sector Growth & Environment Division
Contract No.: AEP-5457-C-00-3061-00
Project No.: 936-5457

Prepared by
Benedict Kanu
Jim Maxwell
John Holtzman

ACKNOWLEDGMENTS

EXECUTIVE SUMMARY

Contents

Tables

Appendices

Bibliography

1.0 THE ROLE OF THE PRIVATE SECTOR IN ALLEVIATING PRIORITY CONSTRAINTS TO FOOD SECURITY IN THE GREATER HORN OF AFRICA (GHA)

1.1 INTRODUCTION

Due to factors such as drought and civil strife, inappropriate Government policies and widespread poverty, most countries of the Greater Horn of Africa (GHA) have suffered and continue to suffer persistent and chronic food insecurity. While the private sector has been engaged in food production, food processing and related agribusinesses in East Africa for many generations, the presence of various constraints combine to greatly lessen the effectiveness of its contribution to overcoming food insecurity problems in the GHA.

The task force of the Greater Horn of Africa Initiative (GHAI) recognizes the above and in pursuit of overall GHAI objectives, especially achievement of on-going regional food security, has transferred funding to AID's Global Bureau to support an activity that will facilitate GHA Missions and other interested entities to jointly address the issue of how the private sector in the GHA can become more involved in food security enhancement. The Global Bureau's Agriculture and Food Security (AFS)/Agricultural Enterprise and Market Development (AEMD) Division therefore requested the Agribusiness and Marketing Improvement Strategies (AMIS) II project to implement an activity entitled "Strategies for Increasing the Role of the Private Sector in Enhancing Food Security in the Greater Horn of Africa".

The purpose of this activity is to facilitate the development of an African-led[1] process for enhancing longer term food security in the Greater Horn of Africa using three study countries, i.e. Kenya, Tanzania and Uganda. The alliance that this activity will develop will identify, and begin the implementation of, ways in which the private sector can play a significant role in alleviating the

[1]Contrary to conventional donor-led approaches over the past 3-4 decades in the design, implementation, management and evaluation of development projects and programs, "African-led" exclusively refers to full leadership and involvement by African Governments, regional institutions, NGOs/PVOs and relevant private sector entities in project/program problem definition and needs assessment, design, implementation/execution, and evaluation, with donors playing only a facilitative role. While revamping conventional wisdom, this approach is intended to, among other things, ensure broad-based and comprehensive ownership and support of the development process by Africans, and subsequently, ensure sustainability.

important constraints to an increased supply of food in food-deficit GHA countries. The activity will feature extensive and intensive participation of the African private sector and will specifically a) define and prioritize the constraints and challenges affecting GHA food security that the private sector can help resolve and b) develop strategies, ideally with regional applicability, which increase the involvement of the indigenous, and to a lesser extent, foreign private sector (e.g. multinationals such as Cargill, Heinz, Lonrho, Dole, etc.) in overcoming food insecurity in the GHA countries, especially those with the most serious food deficits.

The case study countries are representative of the range of countries in Sub-Saharan Africa with respect to their agricultural characteristics (table 1).

Table 1: Selected Agriculture & Food Characteristics of Study Countries, 1992

	Kenya	Tanzania	Uganda
Population (million, 1992)	25.7	25.9	17.5
GNP per capita	$310	$110	$170
GNP per capita relative to Sub-Saharan Africa	Medium	Low	Low
Food prod'n per cap (avg. ann. growth rate, %, 1979-92)	0.1	-1.2	0.1
Daily calorie supply as % of requirements (1988-90)	86	91	83
Share of cereals in diet (%)	58.0	48.1	27.6
Cereal Imports (1,000MT) 1991/92	669	252	22
Cereal Food Aid (1,000MT) 1991/92	162	15	25
Fertilizer consumption (100 grams/ha of arable land), 1991/92	391	153	2
Agriculture's share of exports	65	61	90
Agriculture's share of GDP	27	61	57
Agriculture's employment of work force (%)	75	84	80

Arable land as % of total	20	50	75
Prevalence of Malnutrition (under 5, 1987-92) (%)	18.0	25.2	23.3
Urban pop. as % of total (1992)	25	22	12
Source: World Bank World Development Report, 1994, Various World Bank Staff Reports and UNDP Human Development Report, 1994.			

Tanzania and Uganda represent low income countries in Sub-Saharan Africa, while Kenya falls in the middle income country category. In all three countries, but especially for Tanzania and Uganda, agriculture is the most important sector in terms of contribution to GDP, employment and exports. Although Kenya and Tanzania had about equal population in 1992, average annual growth rate in food production per capita was declining at the rate of 1.2% for Tanzania, while Kenya's, like Uganda's, grew by an insignificant 0.1% annually. During 1991/92, cereal food aid receipts were highest for Kenya and lowest for Tanzania.

1.2 METHODOLOGY

This document reports predominantly on the results of the secondary research. The overall methodology of this activity will be in three phases subdivided into various steps as shown below:

Secondary Literature Review

1) Identify the most important constraints to and key issues for further research on food security.

2) Attempt a preliminary ranking/prioritization of constraints and further research needs.

3) Determine which priority constraints the private sector can help alleviate and the constraints to doing so.

4) Propose how the private sector can help alleviate priority constraints.

One aspect of the methodology used to conduct this activity and accomplish its objectives entails a secondary literature search on: the role of private and public sectors in food security enhancement, production agriculture and agribusiness constraints, food security issues in GHA countries, and

lessons learned in addressing food insecurity problems in non-GHA countries and their implications in the GHA. Figure 1 below is an illustration of the five basic questions (above) that this activity attempts to address and the distribution of sources (secondary/primary literature) to be used for answering them.

Chapter two is a rationale for expanding private sector involvement in enhancing food security in the GHA. Chapters three to five are individual reports for the study countries-- Kenya, Tanzania and Uganda respectively on the above five questions, to the extent they can be answered by secondary research. Chapter six features cross-cutting issues on food security and the role of the private sector in enhancing food security in the three countries, including Uganda's role as an exporter of food to other countries of the Horn. Appendix one is a discussion of detailed and commodity-specific examples of the marketing inefficiencies of Kenyan parastatals. Appendix two contains secondary literature reviews on the role of the private sector in enhancing food security in Eritrea and Ethiopia, and were undertaken with the anticipation that clearance would be granted by the respective Governments for their country's participation in this activity. Unfortunately, clearance could not be obtained from both Governments.

Washington, D.C. Seminar

5) Get AID, MSU and other feedback on the above in the seminar.

6) With feedback and Mission/REDSO input, revise item # 2 above.

Field Work/Workshops

7) Get African Government/private sector feedback on item # 6 above and other donor input as well.

8) At a workshop in East Africa, continue to identify and deliberate on constraints and opportunities for greater private sector participation in assuring food security. Specifically, what can different groups of private sector participants do to promote this initiative.

9) Identify specific private sector companies interested in participation and determine the form of potential involvement, and/or identify specific action measures.

2.0 The Rationale for Expanding Private Sector Involvement in Assuring Food Security in the Greater Horn of Africa (GHA)

2.1 INTRODUCTION/BACKGROUND

Food security has conventionally entailed access by all people at all times to sufficient food and nutrition for a healthy and productive life.[2] At the household level, food security has represented the ability of the household to secure enough food to ensure adequate dietary intake for all of its members. The new approach to achieving food security encompasses food **access, availability and utilization** at regional, national and household levels.[3]

Food Access represents the ability of households and all individuals within them to consume the available food either by producing it or by purchasing it. This includes production for home consumption, food purchases by households using their own resources as well as targeting destitute people for assistance from donors. **Food Availability** corresponds to the existence of a sufficient and consistent supply of food to meet the requirements of all households within a country. Sources of food are domestic production, net food imports and food aid from donors. **Food Utilization/Consumption** refers to the preparation and consumption of an optimal mix of food so as to provide proper nutrition to enable people to lead healthy and productive lives. This includes a good/optimal mix of balanced food in household diets that is prepared to provide the most nutrition and that is consumed at regular intervals as the body needs it or as custom requires. Potable water, adequate sanitation and health services, as well as household knowledge of food storage and processing techniques, nutrition education, and proper child care are also part of effective food utilization.[4]

Food insecurity or less than adequate food security reduces peoples' quality of life (undermines good health) and fosters the unstable social, political, environmental and economic platforms that prevent sustainable economic growth. Poor health constrains labor productivity and represents a significant

[2]World Bank and U.S. Agency for International Development Research Reports, Various Years.

[3]Breaking the Cycle of Despair: President Clinton's Initiative on the Horn of Africa. A Concept Paper for Discussion, Washington, D.C., November, 1994.

[4]Candidate Indicators for Food Security - Food Availability, Food Access and Food Utilization. USAID Food Security Performance Measurement Workshop, Arlington, Virginia, December 11-12, 1995.

impediment to increases in both social and economic growth. Improved health and nutrition will enhance labor productivity and therefore fuel economic growth.

Agricultural commercialization, economic development, and nutrition are linked with one another. Yet, agricultural commercialization, especially in the face of widespread subsistence farming, has been found to generate new food security risks with which small farmers are not able to cope.[5] Understanding the link between production agriculture, agribusinesses and food security is essential; agribusiness development is of more direct relevance to food security than development of other business sectors.[6] The main rationale for this is that without a strong, efficient and effective agribusiness sector, the linkage between producers and consumers will be weak, resulting in product losses, high direct or indirect (Government subsidized) food costs, supply/demand imbalances, poor supply of production inputs, low incomes, and inadequate information flow between producers and consumers. It is also very significant from a development perspective that the raw materials agribusinesses buy, process, store, market locally or export, are most often the same items that are produced by poor, peasant, rural-based farmers who constitute a majority of the population in GHA countries.

2.2 RATIONALE FOR PRIVATE SECTOR/AGRIBUSINESS INVOLVEMENT IN FOOD SECURITY IN THE GHA

In this study, **private sector** refers to commercial entities, i.e. firms with a profit and/or financial motive. It includes (microenterprises, small and medium enterprises, large/multinational private agro-industrial firms, importers/exporters, grain millers, and rural grain producers (smallholder farmers) and their associations). The potential for private sector agribusiness involvement in food security is substantial.

The benefits foreseen from enhanced private sector agribusiness participation in food security alleviation are outlined below.

[5]von Braun, Joachim, Eileen Kennedy, and Howarth Bouis. 1990. Commercialization of Smallholder Agriculture: Policy Requirements for the Malnourished Poor. Food Policy, 15 (February): 82-85.

[6]Tschirley, David L., et al. 1995. Food Aid and Food Markets: Lessons from Mozambique. Food Policy.

< Lowering the Gross Marketing Margin

When viewed from a food system perspective, the marketing spread is the cumulative costs and profits associated with the marketing functions and services performed between the producer and the consumer. An efficient marketing system is one with low gross marketing margins, taking the degree of product transformation or added value into account. Due to the private sector's need to keep operating and administrative costs low as stimulated by the forced discipline and relatively higher efficiency and effectiveness of the competitive market within which it operates, the private sector has demonstrated an ability to achieve and maintain higher levels of performance as compared to the public sector, and thereby operate with lower costs and marketing spreads. Agribusiness efficiency can be enhanced by participants' efforts to improve the quality of raw materials they utilize (lower product losses, higher yields), better timing of delivery of raw materials (lower carrying costs), improved labor utilization (lower unit costs), improved use of fixed and working capital (lower capital costs and capital requirements), etc. Improved effectiveness can be achieved through producing the right product at the right time and making it available in the right place. The net outcomes of lower private sector marketing spreads are higher producer prices for the most appropriate type and quality products, and lower consumer prices, increased food affordability and consequently, enhanced food security.

< Developing Private Sector Capacity

Private sector involvement in food security, particularly in sale and hence the monetization of development and emergency food aid, carries a high probability of creating opportunities for developing the private sector's human, institutional, and infrastructural capacity.[7] If food aid monetization is endorsed and encouraged by the respective Governments of the Horn, and broad-based private sector involvement established and sustained, food aid auctions can enable private entrepreneurs to learn by doing, e.g. which food aid items are most suitable and where, as well as procedures for distributing and selling food items, e.g. meaningful local market acceptance, setting or estimating storage and transport costs, understanding relationships between volumes or sizes of food aid shipment consignment items and actual values, and understanding pricing. The process of price formation may involve private sector players being price takers or on the other hand, it may entail setting prices for differentiated products (without "commodity" characteristics). Once private entrepreneurs come to realize the viability of food distribution enterprises, they are likely to invest

[7]See Tschirley, David L. et al, 1995.

in food storage and transport vehicles and automotive service centers, thereby improving their ability to hold larger stocks and convey them quicker to take better advantage of market opportunities. Earnings derived from their participation in food monetization can be invested into expanding their businesses.

< **Stimulating Rural Employment, Foreign Exchange Generation, and Food System Infrastructure Development**

If agribusinesses and their resource endowments are competitive enough, which is greatly influenced by the efficiency and effectiveness of production agriculture and the quality of the enabling environment, they may be able to penetrate regional and/or extra-continental export markets and earn foreign exchange that can be utilized in private food and non-food agribusiness development as well as by the public sector. The export market is a means of increasing the return on domestic land and labor, and building production and distribution capacity that can be shifted to the domestic market in times of crisis. Successful export marketing will demand increased volumes of output from production agriculture. This will require more raw material inputs and subsequently provide more employment both in agriculture and domestic industry, but not necessarily increase the domestic food supply directly. Foreign exchange earnings from exports of agribusinesses could also be used by the private sector to import food in food-deficit years.

< **Improving Food Quality, Nutritional Value and Accessibility**

Agribusiness processing activities can make a substantive contribution to improved food utilization by improving nutritional quality, digestibility, and palatability. By utilizing improved technology and marketing expertise, agribusinesses can enhance overall consumer access to food through better timing, choice and location of markets and improved and timely dissemination of market information to both producers and consumers, i.e. better supply/demand balancing. This combination of improved food quality, nutritional value and accessibility offers great potential for enhancing food security especially for urban consumers.[8]

[8]Hulse, J.H. Food Processing and Agro-Industries: Engines of Economic Development Essential to Urban Food Security. Paper Presented at IFPRI Open Seminar on Food Security, Washington, D.C., October, 1995.

< Employment Creation

Since the raw materials of agro-industries are largely from production agriculture, which is in turn undertaken generally in rural areas by smallholders, increased demand for such raw materials from agribusinesses generates rural employment opportunities for the semi-skilled and unskilled, and absorbs surplus rural labor. This could enhance rural food and livelihood security and assist in slowing down rural-urban migration, thereby reducing social pressures on urban areas.

< Stabilizing Current Products and Prices

All products of production agriculture and fisheries are in varying degrees perishable. Spoilage, wastage and physical loss can happen at all stages between harvest and consumption, and as such can contribute to destabilization of grain prices. Harvests, existing stocks and imports/exports also cause grain prices to vary seasonally. However, through more efficient and effective processing and utilization of current output from production agriculture, agribusinesses preserve the quality of agricultural products, increase their market value, reduce seasonality and perishability, and in so doing, help to stabilize food prices and enhance food security.

< Reducing Government Subsidies to Parastatals

In most countries of the Horn, state-influenced marketing co-operatives operate in conjunction with parastatal marketing boards in input distribution to production agriculture as well as food/grain marketing. Unfortunately, cooperatives and parastatals have been inadequate or poor performers in their grain marketing functions due to operating inefficiencies (high administrative and personnel costs), weak management, high transport and storage costs, etc. In some countries/commodities, a "buy high, sell low philosophy" has been pursued for political reasons. This combination has lead to parastatals being almost perennially dependent on Government subsidies for survival. These transfers have worsened national budget deficits and supported mismanagement in the quasi-Government sector. By enabling and encouraging private sector involvement in food security, such massive subsidies from Government will diminish, budget deficits are likely to be lower, and savings from parastatal support by Government could be used to facilitate the operations the long-neglected private sector and/or to import food in years of deficit, and thereby promote food security.

2.3 THE APPROPRIATE ROLE OF THE PUBLIC SECTOR IN FOOD SECURITY

States are the signatory parties to the international human rights instruments, and as such have the ultimate responsibility to ensure that human rights are realized. But they strive to achieve this against the backdrop of two ostensibly mounting pressures on them. On the one hand, Governments are asked to relinquished a substantial share of their traditional functions to the so-called private sector for reasons of increased efficiency; their role is further reduced by the process of globalization. On the other hand, they are argued by the international community to make an never-ending string of global summit-level meetings--seven in just the first five years of this decade.[9]

While significantly increased private sector and diminishing public sector involvement in grain marketing, storage and trade serving food security represents an emerging trend, several factors (the most important of which are explained below) support a continuing role for the public sector in several aspects of food security.

< Management of Emergency Food Stocks

Development and management of emergency food reserves in the interest of food security is a serious concern for every country. The management of national grain reserves in the GHA has been the responsibility of the public sector via parastatal grain marketing boards. Given the experience gained by these entities over the years, their current facilities for grain storage, and the political, civil and economic sensitivity of national food security, emergency food stock development and maintenance is invariably a responsibility left entirely to the public sector. As parastatals streamline and divest excess storage capacity determining the optimal size of a strategic reserve stock, rules for buying, turning over and selling grain become priority concerns.

< Food Emergency/Crisis Prediction

National food supply information and early warning systems are a great asset in ensuring advance prediction of impending food shortages and forthcoming food insecurity. Unfortunately, not every country in the Horn operates a fully functional national early warning system. Where such systems

[9]The World Summit for Children (1990); United Nations Conference on the Environment and Development (1992); the international conferences on nutrition (1995); and the International Conference on Women and Development (1995); to be followed by a World Food Security Summit in late 1996.

exist, their functions are often performed jointly by the Ministries of Agriculture, Economic Development and Planning and bilateral (USAID-FEWS)/multilateral donors (FAO). Consequently, only the public sector has received donor support to develop the relevant capacity to carry out this role.

< Financing Food Imports for the Poorest/Most Vulnerable Groups

Distribution of emergency/relief food aid in the Horn and other food deficit regions of the world has frequently been based on a two-pronged approach: program food aid and target food aid. In the former, food aid is sold on the market, while the latter involves free distribution to vulnerable groups, i.e. pregnant and lactating mothers, children under five and the elderly. In the event that pledges for donor emergency/relief aid do not reach a country soon enough to avoid widespread starvation during droughts, civil unrest, etc., a key option is commercial imports by Government, part of which are often distributed free to vulnerable groups. Given the private sector's profit and return on investment motive, the public sector may have to continue to be involved in at least financing targeted (free food distribution) food aid. Also, the private sector could be paid to get involved in the food aid distribution process.

< Remote/High Cost Food Distribution Areas

Private enterprises are unlikely to have an interest in food distribution in rural/remote and often inaccessible areas because of the difficulty and high cost of transporting food across poor roads. Therefore, this is likely to be an area of continued public sector involvement, either directly or indirectly, but possibly implemented via subsidies to private agribusinesses.

2.4 CRITICAL ISSUES IN THE TRANSITION TO INCREASED PRIVATE SECTOR INVOLVEMENT IN FOOD SECURITY

Although shifts in the roles of the public and private sectors in food security have been discussed, several issues (as outlined below) arise while doing so.

< Governments' General Distrust for the Private Sector

Private entrepreneurs engage in business ventures for the short term objective of making a profit and the longer term objective of achieving a reasonable return on investment. Given the sensitivity of food

security, and the possibility of profit-making by the private sector, it has been argued that in the interest of consumer welfare, food distribution is too critical an issue to be left entirely to the private sector. The argument in favor of some Government involvement in food security is based on the State's role in ensuring food price stabilization. In the absence of Government price stabilization interventions, the market failures that are likely to result might be quantitatively more significant relative to the costs Governments would incur to alleviate them. This is the rationale for Government intervention. The argument is also reinforced by the lack of interest by private traders to operate grain procurement and marketing operations in remote areas, and the preference to work in places such as urban centers, where road access is easier, costs are lower, and profit margins may be low, but volume high and overall returns good. In many cases, Government does not believe the private sector can be relied upon entirely to serve humanitarian interests (versus profit) in times of food and/or related crisis.

< Re-employment of Workers Retrenched due to Parastatal Dissolution

Parastatals in the Horn employ large numbers of skilled, semi-skilled and unskilled workers. It is important to plan for ways to re-employ workers being made redundant by parastatals and as a result of a diminished public sector role in the food system. The establishment of a vibrant agribusiness sector will help in that it will require similar skills.

< Financing the Transition to Increased Private Sector Involvement in Food Security

Even when prices are generally stable, investments in the marketing infrastructure are necessary to ensure effective, efficient, continued, and reliable conveyance of food from producers to consumers. In the face of price instability (depending on the source of instability), private sector investments in marketing infrastructure such as vehicles and storage and marketplace facilities are dampened. If the price instability is due to seasonal, anticipated rises in price, the incentive to invest in storage may be strong. Increased private sector participation in food security enhancement calls for the development of an efficient marketing system. Greater efficiency and productivity of agricultural production and marketing is partly a function of public investment in agricultural and marketing system research and rural infrastructure (roads, irrigation, water control, land improvement systems, communications, health centers, etc.), since these activities have a heavy public-goods bias and potential free rider problems and will not be undertaken by the private sector.

< Formulating a Forum to Develop and Begin the Implementation of the Transition

The transition should arrange for continued utilization by the private sector of public sector/parastatal assets which are often not otherwise available such as storage, transport and grading facilities. Offering leases on acquisition of divested parastatal assets could be considered. The transition should also emphasize sustainability, be properly developed to suit local political and socioeconomic conditions and be the guided by a forum comprising well informed public and private sector participants.

PRELIMINARY IMPLICATIONS OF SECONDARY LITERATURE

These issues will form the basis for continuing discussion.

1. Strengthening, instead of weakening, GHA Governments to do the things they are best placed to do as discussed in # 2.3 above.

2. During the transition to increased private sector involvement in enhancing food security, isn't it important not only for Government to fully define fixed assets ownership, but to also fully support/finance the transformation to a market-based food sector?

3. Strengthen civil society as both an active agent and beneficiary of a public strategy to eliminate famine, food insecurity and malnutrition in the Horn.

4. Foster cooperation between state, private enterprise, NGOs and civil society at large.

5. Strengthen the legal framework for food and nutrition rights and related economic and social rights.

3.0 Kenya

3.1 INTRODUCTION

Agriculture is the dominant sector in Kenya's economy, representing in excess of 30% of GDP, providing employment for most of the work force (75%), and contributing 65% of export earnings.[10] Small subsistence farms, small commercial farms, and large farms are all features of Kenya's agricultural production structure. In terms of total agricultural production and marketed output, small-scale commercial farmers are the most important, as they account for 80% of total production and 50% of marketed output. The role of agriculture in employment, income generation, exports, and the servicing of non-agricultural industries all give the agricultural sector an elevated position in macroeconomic well being and food security.

Leading staple food crops include maize, wheat, and rice along with subsistence crops such as millet, sorghum, and beans. In most years, Kenya enjoys self-sufficiency in grains, with the exception of wheat. Kenya's food security is heavily dependent on the performance of maize, which accounts for about 50% of the value of marketed production and 25% of total land area. Imports equivalent to 20% of total domestic production have been made for maize during production shortfalls.[11] Due to an insignificant growth rate in per capita output of food (0.1% as per table 1) caused by rapid population growth in Kenya, agriculture will need to grow at the annual rate of 5.6% in order to maintain the status quo consumption.[12] Barring major maize and other crop productivity enhancements, most analysts forecast structural grain deficits for Kenya by the 21st Century.

Kenya's long history of periodic food production shortfalls is greatly influenced by the incidence of poor weather and droughts. The variability of precipitation which Kenya faces can be better understood in view of the fact that many parts of Kenya have two rainy seasons: one in March-May,

[10]World Bank. Unpublished Material, various years, Washington, D.C.

[11]Shapouri, S., et al. Food Strategies and Market Liberalization in Africa: Case Studies of Kenya, Tanzania and Zimbabwe. U.S. Department of Agriculture, Economic Research Service, Washington, D.C., September, 1992.

[12]USAID. Food Aid and Food Policy Paper. Bureau for Program and Policy Coordination, Washington, D.C., February 27, 1995.

and the other in October-December.[13] If one of these rainy seasons fails, overall food output can decline significantly. Imports of other cereals have also been necessary during drought conditions. Food aid accounts for about 50% of Kenya's cereal imports, up from 20% in the 1970's.[14] Two decades of deliberate Government intervention (via loss-making parastatals) in input supply and pricing, as well as controls on pricing, marketing and distribution of output, have greatly distorted market conditions and discouraged private sector involvement in the sector. Controls on interdistrict maize movement (lifted recently) caused grain prices to rise in some districts and restricted grain access to traders, millers, and consumers in deficit districts. The NCPB's practice of selling maize in urban areas to a relatively small number of registered large scale buyers reduced per unit transaction costs to Government and facilitated the implementation and monitoring of price controls on maize. It had devastating ramifications for food security.[15]

The close interrelationships between agricultural performance, the Government Of Kenya's (GOK) overall economic strength, and food security highlight a need to perceive the latter within an agribusiness context, while noting areas for mutual reinforcement, e.g., a well-functioning market economy. The raw materials that agribusinesses process, market locally or export are the same items that are produced by farmers, the majority of whom in Kenya are poor and rural-based. As a result, if better delivery systems, inputs, infrastructure, extension, technical assistance, and/or regulatory/policy environments are made available to farmers, they are more likely to produce more and better quality agricultural products. Improved post-harvest efficiency and effectiveness and input supply will contribute to more attractive producer prices and lower consumer prices.

Although the need to achieve domestic food security is generally understood in and out of Government, massive production shortfalls in the late 1970's induced the GOK to formulate and promulgate the national food policy statement in 1981.[16] Between 1986 and 88, much was done by the Government

[13]Campbell, D., "The Dry Regions of Kenya" in Drought Follows the Plough, Glantz, Michael H (Ed.), Cambridge University Press, 1994.

[14]Food and Agriculture of the United Nations (FAO). Agrostat Electronic Database. Ongoing.

[15]Mulinge, M. and T. S. Jayne. Urban Maize Meal Consumption Patterns: Strategies for Improving Food Access for Vulnerable Urban Households in Kenya. U.S. Agency for International Development, Policy, Analysis, Research, and Technical Support Project, Technical Paper No. 8, May, 1995.

[16]Food and Agriculture Organization of the United Nations (FAO). Sessional Paper No. 4 of 1981 on National Food Policy. Nairobi, 1981.

in agricultural sector policy reform, but more work in fully liberalizing the food sector and stimulating private sector participation needs to be done. The policy and research debate continues regarding the extent to which food security issues in Kenya should be left in the hands of the private sector, and what would be the role of the state under such circumstances.

3.1.1 OVERVIEW OF THE MICRO-AND SMALL-SCALE ENTERPRISE SECTOR

Kenya's micro-and small-scale enterprise (MSE) sector is dynamic, heterogenous and involved in all sectors of national economic activity, but dominant in agriculture-related activities. In terms of number of workers, MSEs can be classified into enterprises with more than 50 workers (medium scale, which tend to be non-existent outside of commercial and industrial areas), enterprises with 11-50 workers (small scale), and those with 1-10 workers (micro). The MSE population accounts for more than 900,000 enterprises, mostly rural based, employing 2 million people; micro-enterprises make up 99% of the enterprise population.[17] In agriculture, MSEs control most of the agro-processing, fisheries and leather and leather goods processing activities. A key feature of the private sector, especially the medium and large scale manufacturing industries, is that they are characterized by Kenyan citizens of Indian origin who account for less than 2% of the total population.

Kenyan industrialization is characterized by the existence of a rapidly expanding informal manufacturing sector; after growing at around 15% per year in recent years, total employment in informal manufacturing was estimated at 115,000 in 1992.[18] Women-owned enterprises are particularly important because they make up 46% of the Kenyan MSE sector's entrepreneurs and 40% of the sector's total employment, while dominating in the agriculture-based, forest-based, and textile sub-sectors.[19] Of great relevance to the important issue of credit access limitations is the fact that women entrepreneurs generally have more self-reliant credit use patterns than men, using less start-up capital and little formal credit, relying instead on informal credit. They are also more likely to join savings circles as a means of financing their enterprises.

---

[17]Parker, J.C. and Tanya R. Torres (Eds.) Micro-and Small-Scale Enterprises in Kenya: Results of the 1993 National Baseline Survey. GEMINI technical Report No. 75, Bethesda, MD., March 1994.

[18]Kenya Economic Survey, 1993, p. 63.

[19]See GEMINI Report No. 75.

The entire manufacturing sector (formal and informal) is dominated by four key sub-sectors, i.e. food processing, textiles and garments, wood working and metal working, which cumulatively account for 72% of manufacturing output. In terms of employment, the food sector is the largest, providing 32% of sectoral employment (about 8 million people), followed by textiles and garments, metal, and wood representing 26%, 25% and 17% respectively.[20]

The food processing industry, a sub-set of the overall manufacturing sector, accounted for 14% of GDP in 1992 and is central to income generation, overall growth of the agricultural sector and the realization of food security objectives. The main product groups of the food-processing industry are: (a) meat and meat products, (b) dairy products processing, (c) fruit and vegetable processing, (d) grain milling, (e) bakery products, (f) sugar processing, (g) confectionery, and (h) others, such as beverages and honey refining.

The importance of private enterprises, and the need to encourage their development have been at the forefront of GOK policy pronouncements. Efforts made in this direction are restructuring of the Investment Promotion Center, creation of the Capital Markets Authority, establishment of various inter-ministerial steering committees to review and rethink policy, as well as the emergence of main stream thinking in Government about the prominence of the informal or "jua kali" sector.[21]

3.2 IDENTIFICATION AND ANALYSIS OF IMPORTANT CONSTRAINTS TO FOOD SECURITY

3.2.1 GENERAL CONSTRAINTS FACING PRODUCTION AGRICULTURE

The agricultural sector as a whole faces both external and internal problems that have hampered its growth and the achievement of domestic food security. These constraints are outlined below.

*** Limited Availability of Arable Land**

[20]Department of Economics, University of Goteborg, Sweden; and Department of Economics, University of Nairobi, Kenya. Limitations and Rewards in Kenya's Manufacturing Sector: A Study of Enterprise Development, April 1994.

[21]U.S. Agency for International Development. Kenya Country Program Strategic Plan, FY 1990-95. Washington, D.C., March 1990.

Kenya is a highly arable land-scarce country. Less than 20% of the total land area of 57 million hectares is considered to be of medium to high agricultural potential (table 1). Of the remaining 80%, an estimated 60% is desert area with limited potential even for livestock production.[22]

Problems of limited arable land, worsened by a large expanding population estimated in 1990 at 24.2 million with an annual growth rate during 1980-92 of 3.6% (one of the highest in the world)[23], are major constraints to expanding agricultural production, and ultimately promoting food security. Also, the high pressure on limited land has caused a reduction in fallowing practices in some areas, resulting in declining crop yields due to almost continuous cropping on the same land. Increase maize cultivation on land better suited to millet, sorghum and cowpea production or to livestock herding. Also ethnic clashes had land use at their root (Kikuyu settlers on Masai herders land). In the highlands, subdivision of land reduces size of holdings over time. Agricultural development continues to be affected by unequal distribution of the limited arable land, resulting in a loss of potential output because some large farms are under-utilized.

*** Inadequate Producer Price Incentives**

In the 1970's, Government pricing policies resulted in undervalued goods flowing from rural to urban areas, providing limited producer incentives, and consequently, stagnating the agricultural sector. Government's current objective in formulating producer prices is to offer incentives to farmers and to ensure a level of price stability. In an expressed attempt to stimulate efficiency in the pricing system, the Government, in the 1980's, supported a system of annual price reviews for most agricultural commodities (maize, wheat, rice, etc), based on production costs and general market conditions; and price levels were announced before planting.[24] Producers were subsidized in 1992, while in December 1993, all price controls on corn and flour were eliminated.[25] Export-parity pricing for NCPB purchases of maize and wheat stimulated production. But the manner in which agricultural markets were liberalized (input/fertilizer price decontrolled in the face of low maize prices) increased

[22]World Bank. Unpublished Material, various years, Washington, D.C.

[23]See Campbell, D.

[24]See Shapouri, S et al.

[25]Rosen, Stacey. Agricultural Policy Reform: Issues and Implications for Africa. FAER No. 250. U.S. Department of Agriculture, Economic Research Service, Washington, D.C., September 1993.

food insecurity by discouraging fertilizer use in maize due to price disincentives, subsequently reducing yields, output and grain availability.

After restarting an International Monetary Fund (IMP) supported stabilization program in 1993, GOK has made concerted efforts to meet targets, liberalize the maize market, remove price controls, liberalize the import regime, and remove export taxes.[26] While significant progress has been made since 1993 in some areas (liberalizing agricultural markets, minimizing the role of marketing parastatals and restructuring the Ministry of Agriculture), Kenya has failed to complete the implementation of its structural reforms.

On the whole, producer pricing incentives tend to favor food crops. While policies in the 1980's and 1990's generally pointed Kenya in the right direction, their implementation has been limited, or to some extent unsustained.[27]

*** Limited Input Use**

Overall, use of inputs, improved seeds and fertilizer is higher than the averages for Sub-Saharan Africa[28], which are low compared to other regions of the developing world. Although the input market is generally competitive, and features substantial participation of private traders, cooperatives, and marketing boards, extensive input use is precluded by unpredictable Government policies, as well as input shortages due to inadequate supplies and poor market infrastructure.[29] Low input use has in turn constrained overall crop yields, which for maize achieved only 40% of the world average over the past decade. Low use of inorganic fertilizers and hybrid seeds has undermined food security especially for maize, which until recent years, had only one high yielding variety legally available.[30] The key reason for low fertilizer use on food crops is that smallholder producers, who account for the

[26]SRI International. Commercial Policy Assessment of the Greater Horn of Africa Region, Arlington, Virginia, January 1996.

[27]World Bank. Unpublished Material. Washington, D.C. Various Years.

[28]See FAO Agrostat.

[29]See Shapouri, S. et al.

[30]See Shapouri, S. et al and Greer, Joel.

overwhelming majority of output, do not use fertilizer at all, or apply very little, due to the lack of a rural retail fertilizer network.

For maize, the fundamental problem here is that there is little available improved technology applicable to small farmers in less productive areas, and those techniques that have been available have not greatly improved over the years.[31]

*** Inadequate Research and Extension**

The orientation of agricultural research in Kenya has not evolved sufficiently to complement the needs of an agricultural sector whose structure has changed over time, especially with regard to smallholders in semi-arid areas with a generally low resource base. Little research has been done in areas of price responsiveness, labor and input availability, as well as the implications of less optimal utilization of inputs.[32] An estimated 70% of GOK's research budget is allocated to Government-sponsored agricultural research. This went largely to export crops such as coffee and tea (33%) and has been particularly successful in the development of improved seeds for maize (more recently) and wheat, and for improvement of cash crop (coffee and tea) production.

Further, the communication of research results to the farm level, via the main link between researchers and farmers (the Government's extension service), has been quite weak, translating to foregone productivity gains, and ultimately food insecurity. Poor training of field staff and low visitation rate have been blamed for this.

*** Insufficient Availability of Credit**

Formal credit to the agricultural sector is from financial institutions such as the Agricultural Finance Corporation (AFC) and commercial banks. The AFC is the primary Government lending institution for medium to large scale farms. The Government requirement that banks allocate 17% of total credit to the agricultural sector has not been enforced. Smallholders are the major food producers in Kenya, yet, in general, most institutional credit is only available to large-scale farmers. A major weakness

[31]Greer, Joel and Erik Thorbecke (Eds.) Food Poverty and Consumption Patterns in Kenya. International Labor Office (ILO), Geneva 1986.

[32]See Shapouri, S. et al.

of credit institutions' lending to the agricultural sector is the failure to reach the small farmers, including women, who within the MSE sector have been noted to be more self-reliant in their credit use patterns than men. But also, due to the fungibility of agricultural loans, there has been pervasive diversion of agricultural loans to larger farmers for non-agricultural purposes. Small farms therefore either have not utilized credit extensively or borrow extensively from high-interest rate informal sources.

*** Environmental Degradation and Droughts**

Kenya's prevailing environmental problems are partly the result of high population pressure on limited agricultural land and the resulting land use patterns.

The agricultural sector suffers a natural risk of recurrent drought. The most recent droughts occurred in 1984 and 1992. Droughts have been responsible for reduced exports, famine, food shortages, food import dependency on commercial imports and/or aid, high prices of food items and ultimately food insecurity.

*** Road Infrastructure and Support Services**

The road network encompasses some 160,000 km, of which 62,000 km are classified as follows: international trunk roads (3,600 km), national trunk roads (2,800 km), primary roads (7,800 km), secondary roads (11,000 km) and minor roads (26,500 km). In addition, there are unclassified rural access roads with about 8,000 km, and other special roads of about 2,500 km serving various settlement areas. However, the road network has been deteriorating greatly in some areas over the past several years, mainly due to limited maintenance. The poor state of roads is a bottleneck to efficient and cost-effective operation of trucks. In combination, these deficiencies have stood in the way of input supply to production agriculture as well as transportation of output to market centers.

*** Marketing Inefficiencies of Public Enterprises[33]**

Agricultural pricing policies and marketing system efficiency and effectiveness are highly interrelated. Parastatals that were inherited at independence have had overwhelming control over the setting of

[33]Detailed commodity specific examples of the marketing inefficiencies of parastatals are described in the appendix.

marketing functions and pricing policy. But policy intervention and the extent of price control vary from one crop to the other. In 1994, there were 40 boards and agencies. While providing marketing infrastructure, inputs, and credit and in some cases technical advice, Kenyan parastatals have been extremely inefficient and costly.

The inefficiency (from higher operating and marketing costs) of the National Cereals Produce Marketing Board (NCPB), which has historically enjoyed a monopsony in grain marketing, has been an important obstacle to enhanced productivity in the food crops sector. These marketing system inefficiencies have greatly distorted production decisions by lowering producer prices, increasing food costs in many areas (since movement controls prevented spatial arbitrage), and requiring the Government to raise taxes (usually through tariffs on imports of non-agricultural goods, as well as capital goods and imports used in agriculture) in an effort to pay for subsidies.[34] However, the Government took steps toward liberalizing the distribution system in 1991[35], with subsequent removal of all restrictions on wheat marketing in February, 1993. The cumulative effects of the marketing inefficiencies are less than optimal levels of food production, higher than necessary food costs in some cases, and therefore food insecurity.

*** Urban Food Security**

Kenyans deserting their rural homes and agricultural undertakings to move to the cities for supposedly brighter economic prospects (better wage paying employment) pose problems directly and indirectly to the agricultural sector and food security. It is difficult to precisely estimate the impact magnitude of this factor on food security. Of all three study countries, Kenya experiences the highest level of urban demographic pressure (25%--table 1). However, while in the cities, most migrants tend to be "gap fillers" in often lower-wage, seasonal, and low-status construction and service jobs. Although some proportion of these migrants may acquire the skills necessary to accelerate development in their rural areas if they return, the remittances they send back while working in urban areas tend to be spent on housing and consumption rather than long term investment in agriculture. Thus, this migration from rural areas diminishes labor participation and overall investment in agriculture.

[34]See Greer, Joel.

[35]U.S. Agency for International Development (USAID). Critical Issues for American Investors in Kenya. Washington, D.C., April 1992.

In some areas experiencing land shortage (Central Highlands), there is nowhere to start up new farms and subdivision over the years has made holdings small (approx. 1-2 hectares). This translates to lower agricultural production and consequently increased food insecurity. It also puts pressure on smallholders to produce the highest value crops/livestock and use cash to buy lower value grain.

3.2.2 CONSTRAINTS FACING THE FOOD INDUSTRY

As outlined below, the food industry is experiencing many problems. They largely arise from neglect by Government for the sub-sector, even though efforts have been made to generate effective policies for development of the agricultural sector as a whole. These constraints either directly or indirectly affect food security by limiting the volume and quality of food industry output and/or increasing the consumer price of food, due to higher costs of post-harvest activities.

*** Lack of Policy to Ensure Adequate Supply of Raw Materials at Reasonable Prices**

Inappropriate production agriculture output pricing policies and unattractive farm-gate prices for the food industries' raw material inputs (e.g. livestock feeds, cane, wheat, and raw milk for industries such as beef and mutton, sugar and confectioneries, bakeries, and dairy products processing respectively) have caused frequent shortages of these and other raw materials, limited capacity utilization of agribusinesses and hampered the successful operation of the food processing industry. In some cases, raw materials are available, but sold at prohibitive prices.

The manner in which liberalization of agricultural markets has been conducted, beginning in early 1990's, has limited the supply of raw materials (especially wheat) from production agriculture. For instance, due to Government decontrol, fertilizer prices rose sharply, but administered maize output prices remained low, leading to a decline in average maize yields during the reform period.[36] Although NCPB's maize support price was raised above the import parity price in 1993, the decline in maize output during 1990-93 was largely due to lower use of purchased inputs resulting from farmers' reduced fertilizer application rates and/or substitution of manure for fertilizer and animal draft power and human labor for tractors.

*** Inadequate Policy to Monitor the Quality of Animal Feeds**

---

[36]Nyoro, J. Impacts of Market Reform on Wheat Production, Processing, and Marketing. Paper presented at a Conference entitled Towards 2000: Improving Agricultural Performance, sponsored by Egerton University, PAM/KMDP. Nairobi, Sept. 2, 1995.

Price controls on animal feeds by Government, although lifted in the 1980's, have been disincentives for investment by livestock farmers. This affected the quality and volume of livestock produced. Further, in cases where livestock feed and other raw materials for use in production agriculture are available, they are often of inferior quality. Limited research on utilization of maize and sorghum in livestock feed affected the output and quality of livestock feed, the market price of the animals available to meat processors, and the level of profit realized by both the producer and processor.

*** Weak Policies on the Importation of Breeding Material to Improve Local Livestock**

This has affected the quality of pigs and poultry raised in the livestock sector and therefore the quality of mature animals on the market. The scarcity of good quality breeding pigs and the shortages of day old chicks constrained the performance and growth of the meat industry, contributing to lessened food security. However, a notable exception to this is the agribusiness operations of LONRHO, East Africa, based in Nairobi. In its pig and Boran cattle operations, carefully selected parent stocks are crossbred for optimum results and sold on both the domestic and export markets.[37]

*** Domination of the Industry by Parastatal Monopolies**

Several parastatals monopolize the distribution and marketing of livestock products in the food processing industry. They include Kenya Co-operative Creameries (KCC) in dairy products (until its liberalization in 1993) and the Kenya Meat Commission (KMC) in beef and mutton processing. These monopolies have experienced poor management, financial malpractices and general inefficiency. Together with parastatals' pricing and marketing policies, these factors have negatively affected the performance and growth of almost every facet of the livestock processing industry.

*** Lack of Access to Credit from Formal Financial Markets**

This has limited the establishment of new food processing industries as well as the capacity of existing firms to expand. Credit is very difficult for start-up firms, especially MSEs to access. The result has been limited industrial output, lower levels of employment and incomes, as well as greater food insecurity.

[37]LONRHO East Africa Group. House Magazine No. 2, Vol 7.

* **Over-exploitation of Commercially Valuable Stock of Fish**

This is a problem that is specific to the fish industry and brought about by both the establishment of many fish processing industries and the resultant increased demand on marine resources, e.g. fish and shrimp. As a result, excessive pressure has been exerted on Lake Victoria fish supplies.

3.3 PRELIMINARY PRIORITIZATION OF CONSTRAINT FACTORS (TO BE COMPLETED IN PRIMARY RESEARCH)

The entire agricultural system, including enterprises in the input supply, production and food processing and marketing sectors, face numerous operational and other constraints. Overcoming these constraints will directly or indirectly improve the performance of the enterprises, thus increasing food production, availability and affordability, and ultimately enhancing food security.

3.3.1 CONSTRAINTS TO INCREASED AGRICULTURAL PRODUCTION

Constraints are listed in order of declining priority based on the magnitude of the constraint and the potential impacts of its alleviation on stimulating agricultural production, growth and food availability in the near term.

(i) Limited arable land

(ii) Frequent drought

(iii) Limited small farmer access to credit

(iv) Inadequate extension and training of extension agents for crop and livestock production

(v) Unfavorable government controlled pricing structure

(vi) Road infrastructure and support services

3.3.2 CONSTRAINTS TO AGRIBUSINESS ENTERPRISE (FOOD PROCESSING INDUSTRY) DEVELOPMENT

In order of decreasing priority on the basis of the magnitude of the problem and its negative impact on development of the food processing industry, constraints are categorized below.

(i) Uncertain business climate

(ii) Limited input supply, availability, and quality and high cost; due to:

--Poor, undercapitalized private input distribution system

--Poor road infrastructure support services and high cost rural distribution

(iii) Limited small farmer access to credit

(iv) Inadequate extension and training support for crop and livestock production

(v) Unfavorable Government controlled output pricing structure in production agriculture

(vi) GOK policy/regulatory uncertainty and reversals

3.4 PRIORITY CONSTRAINTS WHICH THE PRIVATE SECTOR CAN HELP ALLEVIATE (PRELIMINARY--TO BE COMPLETED IN PRIMARY RESEARCH)

(i) Limited formal credit for private sector investment

(ii) Improving training for private entrepreneurs through apprenticeships with multinationals in and/or out of Africa

(iii) Better identification of investment opportunities in business ventures based on cost-competitiveness, market demand, etc.

3.5 CONSTRAINTS TO PRIVATE SECTOR PARTICIPATION IN FOOD SECURITY ENHANCEMENT (PRELIMINARY--TO BE COMPLETED IN PRIMARY RESEARCH)

Prior to 1993, participation of the private sector in grain marketing was regulated by a wide range of Government pricing, marketing and other related policies that distorted market conditions and consequently discouraged private sector participation in the grain trade. Beginning in early 1993, the grain marketing system was greatly liberalized, thereby removing a number of constraints to private

sector participation in food security enhancement. The major constraints now facing private sector relate to the following.

*** Limited Availability and Use of Improved Technology**

Modern technical capabilities are core elements of agro-industrial development. Expanding technical capabilities opens up possibilities for agribusiness enterprise development. Unfortunately, Kenya's agribusiness/private sector faces some limitations in the acquisition of advanced technology. In one case, Kenyans failed to adopt international breeders' codes, and as a result failed to acquire the improved hybrids. Technology transfer is also limited. The acquisition of technology in agribusinesses mainly relies on direct investment and on imported plant and equipment. Technology limitations constrain productivity and international competitiveness, while rendering investment in agribusinesses relatively unattractive and unprofitable, thereby limiting potential private sector participation in ventures aimed at promoting food security.

*** Inadequate Confidence in and Credibility of the Economic Reform Process**

Kenya's macroeconomic reform program began in the 1980's. The withdrawal of donor support for Kenya in 1991 due to a breakdown in agreements regarding the nature of the structural adjustment program initiated serious economic crisis for Kenya. Political turmoil and ethnic clashes before and after the December 1992 elections also had serious repercussions on the economy. Uncertainty about Government policies have hampered and continue to hamper economic growth. By mid 1992, relations with donors were on the mend, although many donors were still worried about the Government's politics. Violations of basic free market economic principles have devastated investor confidence in the economy. Due to erosion of the private sector's confidence in the Government and the economic reform process, the economy has generally remained in crisis with bleak short term prospects. With the decline of private sector investment in the economy in general and the grain trade in particular, the private sector cannot take the lead in food security enhancement is low.

*** Deterioration of Transport Infrastructure**

Kenya's road network has been deteriorating for some time now. This is due to inadequate maintenance, caused by public sector inefficiency, inadequate Government revenue and corruption. Sections of the Mombasa-Nairobi-Kampala trunk road are in very poor condition due to overuse and overloading. The country's seaports in particular and to some extent its airports are no longer able to cope with the volume of freight movement. The perishability of raw materials for and products of

agribusiness, in the face of the deteriorating transport infrastructure, greatly influences the trading patterns and outcomes of these businesses, especially with regard to timeliness of delivery, delivery cost and/or risk of spoilage and/or accidents. Poor transport conditions increase agribusiness production costs, lower profits, thereby creating a disincentive for entry, and lead to higher food prices for consumers.

*** Biases in the Provision of Credit**

Different categories of firms have different degrees of access to credit. For instance, many large firms can use trade credit from suppliers to finance their activities, but small firms are often compelled to provide extensive trade credits to their customers. Small firms essentially lack access to the formal credit market, largely because of their inability to provide assets for collateral that is often several times the value of the loan. Yet credit is required, among other things, for private sector purchase of trucks to transport grain, as well as to construct grain storage facilities. NCPB's widely distributed public storage has been greatly scaled down over the past few years, although further divestment is required. Public storage tends to undermine private incentives to store and invest in storage. High collateral requirements that small firms face impose a severe constraint on private sector access to institutional credit, and in turn, overall investment activity in food security enhancement.

3.6 HOW THE PRIVATE SECTOR CAN HELP ALLEVIATE PRIORITY CONSTRAINTS (PRELIMINARY--TO BE COMPLETED IN PRIMARY RESEARCH)

(i) Encouraging women-owned, small and medium scale enterprises since women are believed to be more self-reliant with regard to their credit needs than men.

(ii) Strengthening the membership, leadership and functioning of already existing sectoral advocacy groups and associations.

(iii) Improving the efficiency and effectiveness of liaison with policy makers at the local and central Government levels via advocacy groups and associations who help with problem identification and planning for sustainable resolution.

(iv) Improving the quality of products in those areas where the private sector is already heavily involved and has capacity, e.g. food processing, to better serve the domestic and regional markets.

(v) Better identification of agribusiness opportunities in view of existing comparative advantage and other relevant economic and market considerations. The relatively higher inclination to take investment risks that exists in the private sector is a strength which should be should be exploited.

3.7 SPECIFIC COMPANIES INTERESTED IN PARTICIPATION & FORM OF POTENTIAL INVOLVEMENT

---To be done in-country.

3.8 CONCLUSIONS (PRELIMINARY AND BASED ON SECONDARY RESEARCH ONLY)

The greatest opportunity for achieving high levels of sustainable economic growth and development and ultimately food security, at least in the short to medium term, is through increased production and sale of a range of private sector goods and services in the production agriculture and agribusiness sectors.

Since the single largest constraint to increasing agricultural production and ultimately enhancing food security in Kenya is arable land availability and utilization, growth in agricultural output is likely to result from improved yields through the introduction or re-introduction of high yielding varieties and improved cultural practices, rather than from expanded crop area. However, an increase in maize acreage via the introduction of maize on land previously used for other non-grain crops will also increase total food production and availability. But the opportunity cost of doing this will include foregone legume, forage and livestock production in addition to a probable higher risk of maize crop failure.

There is extensive agitation among Kenyans as the state withdraws from its historical domination of virtually every fact of agricultural development and food security and allows widespread private sector participation in these areas.

Author's Viewpoint

The author recommends an alternative approach on the transition from state dominated to increased private sector participation in food security enhancement. Due to the relative lack of capacity and experience in grain storage, transportation, marketing etc. in the private sector, and as a result, the sector's potential inability to manage major food crises without Government assistance, sudden

withdrawal of the state and the immediate entry of the private sector are not recommended. Instead, this process should be phased as part of a long term strategy. Initially, the state should withdraw from most areas of direct production and marketing in favor of designing and implementing policy and related frameworks as well as providing the necessary facilities for the operation of private and co-operative enterprise, including physical infrastructure and credit. Promotion of conducive conditions for business development, especially small scale enterprises, by providing facilitative regulatory frameworks, should also be a major thrust of short to medium term Government policy.

Since most large-scale commercial maize farmers already use hybrid seed and fertilizer to achieve higher yields, the potential for increased yields will more likely come from small holders, who as a group are less productive in terms of output per hectare than large farmers yet are highly price responsive, especially with regard to maize.


Image Not
Available

4.0 Tanzania

4.1 INTRODUCTION

Agriculture is the cornerstone of the Tanzanian economy, accounting predominantly for employment, food and exports. Some 84% of the employed population work in agriculture, producing 61% of both GDP and merchandise exports. The share of industry and manufacturing in GDP are exceptionally low--12 and 5% respectively.

Food crop production dominates the agricultural economy totalling 55% of agricultural GDP, with livestock accounting for 30%, and the traditional cash crops (coffee, cotton, cashew nuts, sugar, pyrethrum, tea, tobacco, sisal) for only 8%. Coffee is the most important export crop. Fishing and hunting contribute 6% and forestry 1% of agricultural GDP.

Although Tanzania's population is comparable with Kenya's, it is the largest country with the least dense and most widely dispersed population in East Africa. The average size of landholdings among Tanzania's 3.5 million farm families is quite small--approximately 0.9 hectare. Some 93% of all farmers cultivate less than 2.0 hectares each.

With an average per capita GDP in 1992 of $110, Tanzania is extremely poor, but remains one of the most politically stable and economically promising countries in Sub-Saharan Africa. Tanzania's per capita Official Development Assistance (ODA) receipts for 1991--$42.7 were the highest in the Horn.[38] Its poverty severely limits domestic investment and encourages dependence on external assistance. Nevertheless, Tanzania plays an important role and position as a stabilizing influence among its troubled neighbors in the Horn.

Principal food crops include maize, rice, millet, sorghum, cassava, beans, and various fruits and vegetables. Maize, the main source of calories in the Tanzanian diet is also the preferred dietary staple contributing nearly 33% to daily caloric intake on a national basis.

Tanzania has produced sufficient food to feed its population over the past few years. However, the averages conceal severe difficulties across regions and age groups in rural areas. Average caloric

[38]World Bank. World Development Report, 1994. Washington, D.C., June 1994.

intake per capita estimated at 2,206 Kcal/capita in 1989 reflects a level of food consumption that is only borderline acceptable. Overall availability of food varies by farming system and region.[39]

Government of Tanzania's (GOT) food strategy objectives are to achieve food self-sufficiency at the national and local levels and to provide an affordable supply of food for the urban population. GOT's policy of controlling the entire food market in the 1980's has undergone extensive revision. As part of its overall reforms that began in 1986, the Government has reduced its role in the agricultural market and has begun, albeit gradually, to encourage private sector participation in the economy.

Women form the majority of agricultural producers, especially in rural areas, but they do not generally operate in the market outside of their local environment. The power of women and division of labor in rural Tanzania have been eroded with the gradual commercialization of agriculture. Women till the land, assist in planting, weed and harvest, yet, men have taken over cultivation of all cash crops, including annuals, the use of new technology, and women's rights have declined significantly.[40]

Recurrent drought conditions and resulting food shortfalls have been experienced in Tanzania on a recurring basis: 1961/62, 1974/75, 1984/83, and 1991/92. Periodic refugees from troubled neighbors also force Tanzania to import food. At the national level, staple food crop production has been adequate in recent years to support consumption. Yet, certain areas are generally considered drought prone/food deficit. These include areas in the following regions: Mara, Mwanza, Shinyanga, Kigoma, Tabora, Singida, Arusha, Kilimanjaro, Tanga, Dodoma, and Mtwara.[41]

From 1966 through the mid-1970's, Tanzania experienced growth as Government controls increased following the implementation of the socialist policies of the 1967 Arusha Declaration. It dramatically reversed the economic climate from a neutral, free-market system to an inward-looking regime based on strict Government control, import-substitution industrialization, and a socialist regime. Arguably the most famous African agricultural policy pronouncement, the Arusha Declaration committed the Government to a major change of direction against the growth of smallholder non-food crops and a discouragement of "kulaks", a class of well to do small farmers. The objectives of the Declaration

---

[39]United Republic of Tanzania and FAO, Comprehensive Food Security Program, October 1992.

[40]World Bank. Tanzania Agriculture. Washington, D.C., December 1994.

[41]Bryson, Judy et. al, A Review of the State of Food and Nutrition in Tanzania and its Programming Implications. USAID/Tanzania, April 1986.

were to achieve self-sufficiency in food production, develop infant industries and human resources, and reduce dependence on foreign investment. The reins of state control affected most sectors and virtually all stages of production, marketing, and distribution. Policy instruments included price intervention and the introduction of pan-territorial pricing, parastatal creation, prohibitive taxes, licensing, quotas, rationing, and restrictions on internal trade.

Real growth in agricultural GDP has paralleled total GDP growth from 1966 through 1992. Agriculture averaged 2.8 and GDP averaged 2.7% per annum. Growth in agriculture lagged significantly behind GDP during the initial period of increased Government intervention (agricultural growth was 45% lower than GDP growth in 1966-75), and 65% lower in 1976-80. In the early 1980's, periods, of reform and economic recuperation, agriculture started to recover, even while GDP growth was negative.[42]

Since agricultural development has lagged behind growth in the economy for most of the period from the 1960's to the early 1980's, notwithstanding Tanzania's rich natural resource endowment base, the need to urgently renew strategies and focus on agricultural transformation are becoming all the more important today. Given the huge share of agriculture in GDP, growth in the economy has also been sluggish over the years. In view of this interdependency, and the role of production agriculture in generating inputs for agribusiness, which in turn process, add value and market food items, the state and performance of production agriculture carry far-reaching implications for the strength and vitality of the agribusiness system, as well as the economy.

Agribusiness development has greater direct relevance to stimulating and supporting production agriculture than does the development of other business sectors. Hence, the relationship between agribusiness development and food security is enhanced because production agriculture's development is of more direct relevance to food security. The raw materials agribusinesses acquire, process and market locally or export are the same items that are produced by poor, peasant, rural-based Tanzanian farmers. Therefore, if farmers have access to and utilize improved delivery systems, inputs, infrastructure and technical assistance, and if regulatory/policy environments are favorable, they are more likely to produce more and better quality agricultural products. In turn, agribusinesses are more likely to receive a better product faster and more cost-effectively. This could ensure supply of less expensive food items. With less expensive food commodities on sale, it is likely that more Tanzanians can afford to purchase food and therefore reduce their susceptibility to food insecurity.

[42]See Tanzania Agriculture.

4.2 OVERVIEW OF THE PRIVATE SECTOR IN TANZANIA

Twenty years (1967-1987) of comprehensive and experimental socialism in Tanzania eliminated private sector activity from the open formal economy and it survived only in rural agricultural areas or the urban informal sector. The country's protracted socialist history obscured the role that private enterprise has and continues to play in the economy. However, the formal private sector is large in comparison to the parastatal sector. And within the economy as a whole, private enterprise dominates, although parastatals play a large role in some key sectors. In 1990, the number of formal private sector enterprises in agriculture and manufacturing represented 66% and 59% of all enterprises respectively. Official records on businesses in the informal sector are limited and/or muddled. According to some estimates, 30-60% of economic activity during the late 1980's was accounted for by the informal or unofficial economy.[43] This has even increased since the start of Tanzania's reform efforts in 1986. Not much is known about the nature of the informal economy, but it is of overriding importance in agricultural marketing (especially of food crops), trade in consumer goods, and export-import activities. Linkages between the informal and formal sectors are underdeveloped, with small firms selling or providing services directly to individual clients.

Although the size of enterprise influences the kind of training required, individual entrepreneurs often lack skills needed to establish simple book-keeping practices, conduct feasibility studies and prepare business plans, secure bank loans, and manage various marketing and management functions. Small to medium-sized enterprises often need help in establishing more elaborate accounting controls, conducting feasibility studies and preparing more complicated business plans, accessing a range of financial services, practicing better financial and personnel management, and addressing domestic and sometimes export marketing issues. Owners and managers of medium to larger-sized businesses often require in-plant managerial and technical consulting and training of staff and/or themselves in computer operations, export marketing, financial and general management. The availability of capital for private investment and development of technical and managerial skills is limited.

As is the case with most other East African nations, the formal business sector is heavily concentrated in a few commercially developed areas. Dar es Salaam dominates the nation's formal businesses with over 50% of the registered firms, about 40% of all formal sector employees, and over half the total fixed industrial capital. About 89% of Tanzania's industrial infrastructure is located in Dar es Salaam or the Arusha-Moshi corridor.

[43]USAID/Tanzania. Finance and Enterprise Development in Tanzania, Vol I, June 1992.

At least 55% of the businesses are in agriculture related activities, 10% in industry and 35% in services. The private sector is supported by a few business associations. The Dar es Salaam Merchant's Chamber represents Asian business interests largely located in Dar es Salaam, while the Tanzania Chamber of Commerce, Industry and Agriculture is the umbrella body representing Tanzania's indigenous private sector. The Confederation of Tanzanian Industries (CTI) represents large scale commercial interests. Municipal Chambers of Commerce such as the Dar es Salaam Chamber of Commerce are weak. However, it is not mandatory for private firms to hold membership in any of these associations.

While formal private sector participation in the economy is still low, in large part due to the historical absence of an enabling environment conducive to private sector growth and development, GOT's current and seemingly pro-business policy stance reflected in recent policy utterings and economic reforms has created some encouraging opportunities for formal private sector growth. The policy and legal stages have been set through extensive economic reform efforts that began, albeit hesitantly, in 1986, although actual implementation remains in an early stage.

However, overall policy and regulatory environment influencing long term private enterprise development remains an impediment to economic growth, and has--apart from the National Investment (Promotion and Protection) Act of 1990--so far not been a subject of major Government action.

4.3 IDENTIFICATION AND ANALYSIS OF THE MOST IMPORTANT CONSTRAINTS TO FOOD SECURITY

4.3.1 GENERAL CONSTRAINTS FACING PRODUCTION AGRICULTURE

The problem of domestic food insecurity in Tanzania is the result of a combination of factors that directly or indirectly affect the performance of production agriculture. These factors are described and analyzed below.

*** Agricultural Support Services and Other Key Production Input Bottlenecks**

The factors discussed below directly or indirectly undermine agricultural productivity levels, impede immediate gains (net farm incomes, and therefore farmers' incentives to produce) in the sector, and render agricultural production enterprises unattractive options for private sector undertaking.

(i) Agricultural Research

The agricultural research system in Tanzania includes more than 50 research institutes, stations and substations, staffed by 350 graduate level researchers and hundreds of technicians and assistants. The network is divided into seven zones, defined by agro-ecological criteria, each with a lead station and substation. In the current structure of the research establishment, parastatals managing agricultural and livestock research have been brought into the Ministry of Agriculture as the Department of Research and Training.

During the 1970's, the research system suffered from the breakup of the East African Community (EAC) which had provided research inputs on export crops and also from the withdrawal of the British Cotton Research Corporation (BCRC). It was also a notable victim of fragmentation increasingly caused by donors. The Government failed to recognize the need for even greater support to research system in the light of these changes, and the problems were exacerbated by budgetary shortages, lack of foreign exchange, and the breakdown of the transport system.[44]

The consequence is that, the research system today, faces severe constraints, as it has over the past twelve years. Key ones include fragmented and poorly coordinated programs, inadequate funding, lack of research priorities--which in turn constrains the ability of policy makers to focus on the direction and effect of research, poor interaction between research, the extension service, and farmers, fragmentation of the research service, deteriorated infrastructure and inadequate work incentives for research managers.

(ii) Agricultural Extension

Agricultural extension is one of the key functions of the Ministry of Agriculture, which uses 7,500 of its 9,400 staff in extension work. One out of every two of the 8,800 villages in the country has a resident village extension worker. Agricultural extension efforts also cover livestock-related activities. Presently, 89% of the funding for Government agricultural services is provided through the Ministry of Agriculture. Some of the on-going problems within the extension system include the existence of a wide disparity in village extension worker abilities, lax management supervision of field staff, weak linkages between research and extension, and the limited representation of women (important players in smallholder agriculture) especially at the higher levels of the extension service.

[44]Bevan, David et al. Agriculture and the Policy Environment: Tanzania and Kenya. Organization for Economic Cooperation and Development, Paris, January 1993.

(iii) Supply of Agricultural Inputs

Chemical Fertilizer

Prior to 1992, the Tanzania Fertilizer Corporation (TFC) was the sole importer, producer and distributor of fertilizer. As of 1992, the TFC imported 20,000 tons and a private supplier, another 45,000 tons. In spite of the monopoly at the wholesale level, there has been a major change in the retail network.

In recent years, fertilizer consumption has been well below demand, constrained by timely availability/import supply and the ratio between fertilizer and output (maize) prices. Over 70% of fertilizer in the country is used in the Southern Highlands, mainly for maize production; 10% of total supplies are used in Tabora and Ruvuma for tobacco production; the remainder is used for maize, tea, cotton, and sometimes coffee. In comparison with Uganda, the use of improved agricultural inputs is fairly widespread, but levels of intensification lag behind Kenya. In 1986/87, approximately 14% of farmers in Tanzania used chemical fertilizers, 27% used improved seeds, 12% insecticides or herbicides, and 24% farmyard manure. Chemical fertilizer use varies by income and literacy levels. 40% of farmers above the poverty line used fertilizer, compared with 30% below the poverty line. Farmers who can read and write use slightly over the mean amount (23.2 Kg/ha), and farmers who cannot read or write use slightly less (18.8 Kg/ha). The distribution of all farmers who use fertilizer is heavily weighted towards the smaller holdings.[45]

Certified Seed

Certified seed represent 2% of seeds planted. The market for certified seed is shared by Tanseed, a Government parastatal, and Cargill, a private sector company. Under the Government system, foundation seed are multiplied at five national Foundation Seed Farms to meet the requirements of Tanseed. But due to uncertain demands for certified seeds, Tanseed, at times, does not honor its contracts, leaving the Foundation Seed Farms holding excess seed.

* **Availability of Formal Credit**

[45]See Tanzania Agriculture, 1994.

Financial institutions in the formal sector that provide rural finance include the Bank of Tanzania (BOT), the National Bank of Commerce (NBC), and the Cooperative and Rural Development Bank (CRDB). Agriculture accounts for 55% of NBC's total loan portfolio, while CRDB provides lending for seasonal inputs, farm mechanization, livestock, rural transport, fisheries and other rural activities, and since 1987, limited financing to cooperatives for crop purchases.

The use of formal credit is rare at the farmer level, but there is also a lack of awareness, and a fear of indebtedness in rural communities. Informal credit terms vary with the source; interest rates range from zero percent for loans from family and friends to 100% per annum for short-term credit at marketing time. Short term financing for crop purchases and input distribution which form the bulk of formal sector lending to agriculture account for over 80% of total bank lending to the sector. Lending for activities related to agriculture (exports, crop marketing or production) declined dramatically as a share of the total because of the decline of lending to single crop parastatals such as the National Milling Corporation. In real terms, lending for agricultural production and marketing declined through 1986 before jumping in 1987 to a new plateau influenced by the need to finance increased levels of agricultural exports.[46]

Smallholder access to formal lending mechanisms through the existing financial institutions is limited by the high transactions costs associated with lending small amounts to a large number of smallholders, and the lack of collateral such as land. However, donor financed projects are augmenting formal credit provision directly to smallholders.

*** Rural Road Transportation Infrastructure**

Tanzania has a road network of 88,000 km, 10,300 km of which are trunk roads, 17,730 km are regional and 32,000 km are district roads. The remainder are unclassified. Little maintenance work has been undertaken on the road network during the 1970's and 1980's, and road surface quality has therefore deteriorated significantly. The East-West corridors, those through which food supplies for urban Dar es Salaam are shipped (Tanzania-Zambia corridor) or through which cash crops are exported (Northeast corridor), are those with most the traffic.

*** Land Tenure Problems**

[46]Bank of Tanzania. Economic and Operations Report for the Year Ended 30th June, 1991.

Although the degree of inequality in land distribution between households (e.g. 3.5 million small farmers farm about 3.1 million ha and 93% of them cultivate less than 2 ha) appears to be lower than in other African countries[47], the source of small farmers' claim to tenure of the land they cultivate is due largely to traditional mechanisms which include inheritance, allocation by village elders, and investment in clearing.[48] While the situation varies in different parts of the country, the tenure regimes are still heavily influenced by customary tenure systems of communal land ownership and very rare transfers of user rights outside the clan.

Access to land is therefore a problem in certain areas, especially the high potential areas in the Southern Highlands (Mbozi), and the Northern Highlands (Hai). However, even in the semi-arid lands in Shinyanga (Kwimba), access to land is quite or very difficult.

4.3.2 CONSTRAINTS TO DEVELOPMENT OF THE PRIVATE SECTOR

Since Tanzania attained independence over three decades ago, it has experienced dramatic reversals in the role of the private sector in the country's development strategy. As a result of the social and economic experimentation of the 1976 Arusha Declaration, private enterprises were entrenched in a web of constraints. Since the economic reforms that began in 1984, however, the GOT has demonstrated increasing tolerance for private activities and eased many of the constraints on private firms. The key constraints now facing development of the private sector are discussed below.

*** Availability of Formal Credit**

Although the reforms of 1985-90 significantly reduced foreign exchange constraints, the availability and cost of formal credit is still a leading impediment to the development of Tanzania's private sector.

There are currently no commercial financial institutions providing capital for business start-up and/or expansion in the micro-enterprise and small scale markets. There is a minimal amount of working capital and trade finance being provided by NBC and two foreign banks, Meridian BIAO and Standard Chartered to well established customers with adequate traditional collateral and security. Standard

[47]Collier, P et al, Labor and Poverty in Rural Tanzania, Clarendon Press, Oxford, UK, 1990.

[48]World Bank. Tanzania - A Poverty Profile, Report 12298-TA, December 1993.

Chartered serves only the large corporate market. Both commercial banks are not providing financing directly to micro and small enterprises. A private development finance institution, Tanzania Development Finance Limited, focuses on long term project finance with medium to large size customers. The lack of credit and financial services limits the ability to identify the full demand for financing or the availability of hidden savings in the economy that could be mobilized through an efficient and transparent financial market.

*** Weak Physical Infrastructure**

The economic crisis of the 1970's and early 1980's led to severe infrastructural deterioration in Tanzania. As a consequence, the supply of basic infrastructural services is limited and considered unreliable to meet the needs of the existing private sector as well as the potential requirements of new investors. While progress is being made to expand the power supply (which is extremely unstable and experiences frequent outages), port infrastructure, and road networks, existing needs are still enormous and may not be met without expanding private sector involvement in the development, delivery, and management of infrastructure.

The requirement for the development of a modern telecommunication system is one infrastructure need which is particularly important. Reliable communication capabilities are especially important for financial, tourism, mining, transport, service and export-oriented business activities in Tanzania and are becoming increasingly important in the sale and distribution of agricultural products. Yet, the existing telecommunications infrastructure has a grossly insufficient capacity and a very poor quality of service. In 1991, 0.3% of Tanzanians had telephones or 25% less than the average percentage of the telephones in Sub-Saharan Africa. In addition, only 60-70% of the installed phones actually worked. Fault rates are 30 times higher than those in developed countries.[49] A reasonably reliable telecommunications sector is crucial to the sustained economic recovery of Tanzania.

The main linkages between telecommunications and private sector development are (a) the requirements of business and Government in a market economy for timely, accurate, and reliable information; (b) telecommunications as a prime medium for transmitting business information quickly, cheaply, and easily; and (c) the cost to businesses and the economy as a whole of foregone economic opportunities due to an inadequate and unreliable domestic and international telecommunications network.

[49]World Bank. Tanzania Export Development Strategy. Washington, DC, July 1995.

*** Limited Business Management Skills**

The deficiencies in management skills of Tanzanian entrepreneurs vary greatly. Substantial amounts of technical assistance and training are needed in the area of entrepreneurial development alone. Small and Medium Enterprises (SMEs) lack skills in accounting, financial management, strategic planning, market development, and facilities management and maintenance. Smaller firms suffer from a lack of understanding of, and difficulties in complying with, Government licensing and reporting requirements and other regulatory procedures. Large firms, principally traders--importers, retailers, and exporters of goods--generally taking the form of holding companies with numerous subsidiaries, are dominated by the Asian business community. These firms need to take a more active role in the productive sector and need technical assistance in quality control so as to catalyze Tanzania's entry into the export market in non-traditional goods.

*** Shortage of Business Information**

Part of the legacy of socialism includes a prevailing mistrust for the private sector as well as widespread scarcity of business information. There is need for business publications and bulletins, workshops, and other mechanisms to increase awareness of the positive contributions of private enterprise to the economy. There is demand for information on basic business practices that can be distributed to individuals interested in the opportunities presented by the new business environment.

Business information could provide Tanzanian entrepreneurs with updated ideas and news about the various business possibilities that may exist, techniques for business start-ups or expansions, as well as entrepreneurial lessons and success stories in other countries.

*** Unfavorable Government Regulatory Environment**

Compared to the early 1980's, the investment climate provides an improved environment for local and foreign businesses. The new investment code of 1990 provides a package of investor incentives that include tax holidays, import tax exemptions for selected imports of private businesses, repatriation of retained foreign exchange earnings, and improvement in licensing procedures for businesses.

But there are still trials and tribulations in doing business in Tanzania. Other areas that need to be addressed are: completing the elimination of existing controls on internal trade, particularly for export crops such as coffee and cotton; eliminating politically motivated meddling and corruption; rewriting

of corporate laws and business regulations to reflect the private sector orientation of the economy, licensing procedures and industrial land zoning.

*** Political Risk and Uncertainty**

Compared to other African countries, Tanzania has enjoyed an unusual degree of internal stability and social harmony. Tanzania is not known to have involved itself in politically motivated damage to foreign property. However, the ongoing controversy over indigenization in the process of privatization raises a number of concerns about the future of the business climate for foreign firms. One risky issue underlying GOT's plans to divest over 300 commercial public enterprises concerns ownership. African Tanzanians fear that outright sale to the highest private bidders would put all the privatized enterprises into non-indigenous[50] ownership. Such a nationalistic attitude inhibits incentives to undertake either expansion or replacement investment in the private sector.

Author's Viewpoint

One approach that the GOT may consider is to initially auction off a few public enterprises and with the assistance of donors and the private sector, observe any developments in the ownership/investment pattern, and whether or not people's worst fears are confirmed before proceeding with large scale divestment. Also, African Tanzanians could participate as shareholders in joint stock companies, although this would require a major effort to educate and organize people. For instance, cotton growers of a particular can be organized to buy a cotton gin/mill in that region, which processes their cotton. This might have more of an impact than broad public relations campaigns to convince people that foreign ownership of divested parastatals is not entirely bad.

4.4 PRELIMINARY PRIORITIZATION OF CONSTRAINT FACTORS (TO BE COMPLETED IN PRIMARY RESEARCH)

The constraints that production agriculture and the private sector in Tanzania face, which in turn impede the contribution of both sectors to enhancing food security, are prioritized below on the basis of the magnitude of the positive impact from their alleviation.

4.4.1 CONSTRAINTS TO INCREASED AGRICULTURAL PRODUCTION

[50]This is a term used to refer largely to Tanzanians of Asian ancestry but also extends to foreign investors.

(i) Limited small farmer access to credit.

(ii) Inadequate agricultural research and training/effectiveness of extension agents.

(iii) Land tenure problems.

(iv) Poor physical infrastructure.

4.4.2 CONSTRAINTS TO DEVELOPMENT OF THE PRIVATE SECTOR

(i) Shortage of institutional credit.

(ii) Infrastructural problems.

(iii) Limited business management skills.

(iv) Shortage of business information.

(v) Slow pace of privatization and fears of private sector domination by foreigners.

4.5 PRIORITY CONSTRAINTS WHICH THE PRIVATE SECTOR CAN HELP ALLEVIATE

(preliminary--to be completed in primary research)

(i) Stimulating provision of investment and working capital.

(ii) Enhancing general agribusiness information dissemination and creating awareness about the benefits of foreign agribusiness multinational involvement in Tanzania's private sector.

(iii) Improving training in agricultural research, extension agronomy and agribusiness management using local Colleges and Universities as well as overseas training.

(iv) Upgrading input supply and distribution services to production agriculture and agribusiness.

(v) Improving marketing of output from production agriculture and agribusiness locally and via cross-border trade.

4.6 CONSTRAINTS TO PRIVATE SECTOR PARTICIPATION IN FOOD SECURITY ENHANCEMENT (PRELIMINARY--TO BE COMPLETED IN PRIMARY RESEARCH)

Tanzania's food sector suffers from various constraints that discourage and/or inhibit participation of private businesses in the grain trade, and subsequently food security enhancement. These constraints are explained below.

* Limited Formal Credit for Micro and Small Scale Businesses

Lack of access to finance is arguably the single most dominant constraint that inhibits private sector participation in food security enhancement in Tanzania. Credit is inadequate for most businesses to meet their working capital needs. The smaller the size of the business the more likely is the entrepreneur to face problems of lack of credit, and to be rejected if he or she applied. The particular needs of micro and small scale businesses and their inherent risk and relative lack of collateral prompt lending institutions to be cautious and conservative in dealing with the sector. Yet, greater access to credit is especially important for dynamic small-and medium-scale enterprises whose growth potential outstrips the financing attainable from internal or informal sources.

While lack of credit could be overstated as a major constraint to private entrepreneurial participation in food security enhancement, it is also important to note that the management weaknesses of some private businesses may limit their ability to utilize formal credit effectively and efficiently. Additionally, the financial problems of some business would not be solved by borrowing. For example, weak demand and strong competition may be the main causes of a tight cash flow situation.

However, as part of its economic reform program that began in the mid 1980's, reforms within the sector have entailed various initiatives to strengthen the financial system in order to promote the mobilization of savings for private sector development in Tanzania. Two centerpieces of these initiatives include the introduction of private banks and steps to improve the NBC, which dominates the commercial banking sector and enjoys 90% share of the market.

* Government's Slow Pace with Privatization Reforms

GOT's market intervention during the 1970's and 1980's translated to the creation of public institutions to function as agents in the market and the design and implementation of anti-private sector policy. At the institutional level, the state created public agencies to fulfil a range of marketing activities: purchase of crops, supply of inputs, allocation of consumer goods, provision of credit, etc. The public

entities created had monopoly trading rights and were a severe drain on the economy. The Government also banned other institutions, private or co-operative, which might have competed with them. Private trading was condemned ideologically and the importance of trading downgraded relative to production. Private agents' fear of public scrutiny minimized private sector efficiency. These Government actions led to the virtual collapse of the transport, credit and exchange components, thereby hitting production agriculture and agribusiness with particular severity.

Although dramatic economic reforms of the mid-1980's have provided a much-needed boost to economic activities by liberalizing trade, foreign exchange, pricing, interest and investment policies, the reform program has been gradualist and limited in nature, and various components of it that would particularly boost long term private sector-led growth are yet to be completed. These include complete elimination of existing controls on internal trade, particularly for export crops such as coffee and cotton, rewriting of corporate laws and business regulations to reflect the private sector orientation of the economy, licensing procedures and industrial land zoning.

* **Weak Physical Infrastructure**

As noted earlier, Tanzania's economic crisis of the 1970's and early 1980's has led to a severe deterioration in the country's physical infrastructure (roads, telecommunications, electricity, ports, etc). Yet, improving roads has a valuable rate of return resulting from the increased traffic, reduced transport costs, improved access to agricultural inputs and better agricultural output. On the whole, better roads are likely to augment food security than not. The present dilapidated state of Tanzania's road infrastructure, especially the relatively small proportion of expenditures which are devoted to the agricultural feeder road system, will neither be able to support the needs of the expanding agribusiness private sector, nor offer an incentive for new ones to invest, thereby constraining their contribution to food security enhancement.

* **Perceptions of Possible Domination of the Private Sector by Foreigners**

Especially after the new investment code of 1990, the investment climate in Tanzania offers a more tolerant environment for local and foreign business activities compared to the 1970's and early 1980's. Unfortunately, overhanging this relatively favorable environment is an on-going controversy over indigenization in the process of privatization. And a number of concerns are raised about the future of the business climate for foreign and local firms. As GOT plans to divest over 300 commercial public enterprises, the issue of ownership risk greatly concerns African Tanzanians with an interest in agribusiness investment who increasingly fear that outright sale to the highest private bidders would

put most, if not all of the privatized enterprises into non-indigenous (Asian) ownership, since most individual Tanzanians lack the finances to purchase these public enterprises. However, as proposed earlier, African Tanzanians could participate by organizing themselves into groups of shareholders in joint stock companies.

*** Limited Awareness of the Existence of Business Opportunities**

After several decades of deliberate Government efforts to promote socialist policies and stifle the private sector, the Tanzanian public currently suffers from a widespread shortage of information on the private sector and its potentially positive future in the country's development. The public is not adequately "literate" and "educated" about opportunities and procedures to engage in and develop small scale businesses, be they in production agriculture and/or agribusiness. This lack of information and know-how limits involvement of private entrepreneurs in a variety of potentially viable food and non-food lines of business.

4.7 EXAMPLES OF HOW THE PRIVATE SECTOR CAN HELP ALLEVIATE PRIORITY CONSTRAINTS (PRELIMINARY--TO BE COMPLETED IN PRIMARY RESEARCH)

(i) Expanding and strengthening memberships of existing rotating credit associations or creating new ones to service the working/start-up capital needs of businesses.

(ii) Organizing themselves into groups that will buy share in divested joint stock companies.

(iii) Liaison between private sector associations, self-help groups, cooperatives, and local NGOs to deal with private sector problems and communicate with policy makers to address systemic ones.

(iv) Improving the quality of services in those areas of food security in which the private sector is already involved, e.g. transportation and distribution. Some form of Government/donor assistance will be required in planning, design, etc.

4.8 IDENTIFY SPECIFIC COMPANIES INTERESTED IN PARTICIPATION & DETERMINE FORM OF POTENTIAL INVOLVEMENT

---To be done in-country.

4.9 CONCLUSIONS (PRELIMINARY AND BASED ON SECONDARY RESEARCH ONLY)

Due to the numerous and deep-rooted challenges that Tanzania's agricultural development faces, the country is far from achieving the production levels in agriculture and food supply which are possible with existing technology and available resources. Successful farmers have to overcome various problems including those of limited formal credit, distance from markets for products and inputs diseases affecting both livestock and crops, and droughts. In a semi-subsistence agricultural economy such as Tanzania's, growth in food production may continue at more or less the rate of growth in population.

Overall, there has been a relative neglect of agriculture and the granting of an inappropriate priority to industry. For Tanzania to meet the challenge of raising agricultural growth rates above population growth and be food secure, its 3.5 million subsistence farm families must voluntarily enter the market economy. Smallholder farmers who are integrated into the market economy are likely to respond rapidly and efficiently to both positive and negative market initiatives.

To the extent that past trends in domestic food production continue, there is no likelihood that the food gap will be closed. Under such circumstances, there will be continued reliance on food imports for food security. Success in bridging the gap will ultimately depend on the extent to which past performance in agricultural production can be improved upon and import capacity improved by means of strengthening and deepening the country's export base.

Tanzania should now place greater emphasis on export-oriented strategies. Since the overall national development is integrally linked with agricultural sector growth, this calls for greater efforts to raise agricultural output.

With its mild climate and diverse agricultural base, and easy air cargo access at the Kilmanjaro and Dar es Salaam international airports, attractive opportunities exist in a variety of agribusiness ventures, particularly in adding value to agricultural raw materials for exports. In the agribusiness sector, of the over 8,000 square kilometers of land area, only 12% is currently under cultivation. Continuing the export of medium-value food items such as maize and beans to food-deficit Kenya will earn Tanzania valuable foreign exchange and enhance food security in Kenya. Existing cash crops such as coffee, cotton, sisal, cashew nuts and cloves could serve as a base on which to add value for export. Investors can also find attractive opportunities in high value fruits (pineapple, mango, avocado and guava) and vegetables, spices and cut flowers, for which there are ready markets in the Middle East and Europe. Tanzania's geo-political advantage within regions of the Southern Africa

Development Community (SADC) and the Preferential Trade Area for Eastern and Southern Africa (PTA) provides the country additional potential for access to the markets of Zambia, Eastern Zaire, Malawi, Rwanda and Burundi, which are greatly dependent on Tanzanian ports. The country also enjoys duty-free market access to Europe and the U.S. for most agricultural products, manufactured items and unprocessed products. The principal agricultural exports to the U.S. are cashew nuts and coffee.

In order to maintain high rates of growth in agricultural output, Tanzania should, in the short run, emphasize export crops, where world markets can absorb the increased production without necessarily affecting prices, since Tanzania is a price taker for its traditional and non-traditional exports. Additionally, production of raw materials for the domestic agribusiness industry (cotton, sisal, leather, fruits and vegetables) will be important. Food production can also be expected to grow, although perhaps not as rapidly as other sectors, in response to population growth, increases in per capita incomes, and as improved technology becomes accessible to small farmers. In the medium term, as improvements in the technology for basic food crop production are generated and diffused, a rapid expansion can be expected, which may lower real food prices and support development in other sectors.

Malnourishment could be eliminated or substantially reduced if the nation is able to attain high per capita income growth rates, if it continues on the path toward greater income equality, and provided that food is made available on a relatively cheap (affordable) basis to the target (malnourished) population. Optimum results are likely to be achieved if the above are combined with prudent population growth and nutrition education policies.

The central challenge for private sector development in Tanzania in the 1990's is to devise and implement a development strategy that enables private entrepreneurs to become the engine of sustained and efficient economic expansion.

Both for economic and political reasons, smallholder production will continue to be central for Tanzania in the 1990's. This is chiefly so because smallholder production of high-value commercial crops represents a key instrument to secure both extensive private participation in economic growth and to diffuse economic benefits broadly. With the near elimination of price controls and administrative allocation of foreign exchange, and the intended abolition of the monopolistic control of marketing authorities, weaknesses in support systems now represent the most binding constraints for the private smallholders. The most urgent reform priorities in this area are enhancing the capacity and responsiveness of the rural transport infrastructure and of the input and output distribution systems.

Over the longer term, concessional agricultural credit, especially for micro and scale enterprises, research and extension services (maximizing the opportunities for private participation), and land titling, should receive attention. Reforms of the distribution and credit system should aim to help create an environment that would broaden the base of private individual participation in these sectors. Agricultural markets should then be wholly liberalized, with private traders free to purchase all agricultural commodities directly from farmers.

5.0 UGANDA

5.1 INTRODUCTION

The Ugandan economy is predominantly agrarian. Although agriculture's contribution to GDP dropped sharply from 60% in the mid-1980's to 51% in 1991, the sector still accounts for over 90% of exports and employs 80% of the employed household population. The share of industry in GDP is exceptionally low (10% in 1990), while the manufacturing sector stands at 4%.

Some 85% or more of the population live in rural areas where they are engaged predominantly in agriculture. Small holders (mostly women) account for practically the entire agricultural output. Approximately 2.5 million farm households, 80% of whom cultivate less than 2.5 hectares of land each, primarily using labor-intensive methods of production, characterize Ugandan Agriculture. Agriculture (particularly coffee) is the most important contributor to Government export revenue.

Foods produced are high in starch. Bananas (the main food crop) and root crops (cassava, sweet potatoes, etc.) account for 50% and 35% of total tonnage respectively. Cereals (maize, millet, sorghum, etc.) account for 10% of food production, and pulses the remaining 5%. Bananas account for 33% of the 3.9 million hectares under food production. Food crops, the special domain of women, are some of the most lucrative cash crops.

Production of subsistence food crops is the most widespread economic activity in Uganda. In tonnage terms, the share of food crop production in total agricultural production in 1990 stood at 78% compared to 4.5% for traditional cash crops (coffee, cotton).[51] In spite of the devastation caused by civil wars, periods of economic deterioration during the 1970's and 1980's and low yields in agriculture, Uganda has not suffered widespread famine or starvation. Instead, it has remained more or less food self-sufficient. This does not mean that food insecurity does not exist and is not a problem, but it does appear that small farmers have generally proved remarkably resilient in maintaining their levels of food production and consumption.[52] The country's tendency to be generally

[51]USAID. Uganda Country Program Strategic Plan, Volume I, 1992-97.

[52]Inter-Governmental Authority on Drought and Development (IGADD). Food Security Strategy Study - Uganda Country Report.

food secure is also partly because, with rich soils and all-year round rainfall, the country is very fertile, and due to a relatively plentiful supply of land, landlessness and overly small holdings (as in Kenya) are not widespread problems.[53] While the level of total food consumption in rural Uganda is generally adequate, per-capita calorie availability is significantly less than adequate.[54]

As is generally the case with other GHA countries, food security (access to food) is a problem in certain areas of rural Uganda. Small farmers of Northern and Northeastern Uganda have been the most food insecure. The reasons for this are climatic (uneven rainfall pattern), technological (limited availability of agricultural inputs), economic (non-availability of consumer goods and poor rood infrastructure), and civil strife (in the North, it disrupted production).[55] In general, limited availability of agricultural inputs could be the function of a poor distribution system (an economic organization or incentives problem) or a poor road network (an infrastructural problem). However, with periodic droughts and localized food insecurity, mainly in the North and North East, Uganda has required emergency food responses three times in the past decade. Excessive and uncoordinated grain purchases by donors (e.g., purchases of the World Food Program--WFP and European Union--EU in 1995/96 for emergency operations in the region) and aggressive promotion of agricultural exports, i.e. cereals and beans (revenue from which needs to be spent more in addressing long-term food insecurity problems) also run the risk of creating food insecurity.[56]

In the agricultural and food sectors, the main aim of Government is to ensure national food security and to produce a surplus for export. The Government of Uganda (GOU) views agriculture as a resource rather than a burden and as such looks to farmers to produce exportable surpluses of food crops and non-traditional export crops. Currently, Government intervention in agriculture is limited compared to its pre-1986 policies.

Women are central to Uganda's food security for several reasons. First, most Ugandan farmers are women and increasing their productivity will enhance agricultural performance, rural incomes, and

---

[53]de Conick, J. and Roger C. Riddell. Evaluating the Impact of NGO's in Rural Poverty Alleviation - Uganda Country Study. Overseas Development Institute Working Paper No. 51, London, February, 1992.

[54]World Bank. Uganda Agriculture. Washington, D.C., June 1993.

[55]See IGADD, Uganda Country Report.

[56]Famine Early Warning System (FEWS) Bulletin, AFR/95-08, October 23, 1995.

food security. Second, women are more likely to suffer malnutrition during pregnancy, and their nutritional status largely determines that of their children.

Population growth is an overriding concern for economic development and sustained food security in Uganda. With population growing at an annual rate of 2.6%, agricultural output at 0.9% annually, and food production 1% in 1991[57], it may be difficult in the long run for the economy, and agriculture in particular, to keep pace and to generate the output growth needed to sustain food security. In order to maintain status quo food consumption, agriculture should grow at the rate of 3.3% annually in Uganda.[58]

Until 1986, when major macroeconomic policy reforms were implemented, the GOU directly controlled food and export marketing and pricing, provision of agricultural inputs, and intervened heavily in the foreign exchange market. These practices constrained development of the agriculture and food sectors. The effects of the structural changes made as part of economic reforms since 1986 have continued to work themselves out in the 1990's, but their full effects on food security will largely depend on actual progress made in the divestiture of Government-owned grain parastatal enterprises.

Since Uganda is largely self-sufficient in food, has the potential to increase production, and the comparative advantage to produce food crops, especially in non-drought years, the focus should now be on sustaining GOU's policy reform measures and increasing the availability of the relevant food production technologies. Long-term food security also depends on the sustained, broad-based growth of the economy, which raises incomes for all socioeconomic groups and redistributes them equitably. Broad-based economic growth calls for an appropriate and enabling policy environment, as well as support for sectors other than food production, including export products, development of micro-enterprises, and agribusiness industries.

A key link between agricultural production and agribusiness exists because agribusiness development per se is of more direct relevance to food security than development of other business sectors. This

[57]See Uganda, Agriculture, June 1993.

[58]USAID. Food Aid and Food Security Policy Paper. Bureau for Program and Policy Coordination, Washington, D.C., February, 1995. This estimate is based on the existing poor rural urban road infrastructure that hampers access to food by limiting the volume of farm production that makes it to the market.

is explained by the fact that the raw materials agribusinesses process, market locally or export are often the same items that are produced by poor, rural-based farmers (mostly women) in Uganda. Agribusinesses generate rural employment opportunities, absorbing surplus rural labor usually of a seasonally nature, and increase rural incomes and investment in rural zones, which is key to reducing the urban agro-industrial bias. Further, agribusinesses stabilize prices as food processing effectively reduces the seasonality and perishability of agricultural products, though the processed products are different from the raw, fresh produce. The food processing industry saves foreign exchange via import substitution. The magnitude of net foreign exchange savings is dependent on foreign exchange savings on the output side relative to higher foreign exchange costs on the input side for imported fuel, equipment, parts. Food processing may also generate foreign exchange earnings via exports. Additionally, it strengthens sectoral linkages between agriculture and industry, while increasing the value-added to farm products. Post-production agro-industries enhance farmers' productivity and incomes through expanded marketing opportunities brought about by processing agreements, as well as through the reduction of post-harvest losses. Finally, agribusinesses promote higher multiplier effects due to close forward and backward linkages with product distributors and suppliers of raw materials and processing inputs.

5.2 Overview of the Private Sector in Uganda

Uganda possesses an entrepreneurial class with great energy, national commitment and competitive spirit, which has demonstrated ingenuity and flexibility in coping with a difficult institutional, infrastructural and policy environment brought about by political strife. Information is severely lacking on the informal sector, which appears constrained by weak domestic demand.[59] The distribution of entrepreneurship is unknown, and the business environment is unstable and insecure.

Agribusiness development however predates independence in 1962, as major investments were made in export-oriented commodity systems, such as cotton, coffee, sugar, tea and tobacco. Most of industry and commerce has been based on the supply of production goods and services needed by the agricultural sector. During 1962-72, agribusiness grew rapidly, with Uganda producing virtually all essential requirements for food, fiber, and beverages. Local production of inputs to production agriculture including tillage tools, implements (hoes and oxen ploughs) and fertilizer, largely by small scale businesses, met most needs for machinery and spare parts. Unfortunately, the political turmoil

[59]According to the World Bank, per capita GNP in Uganda was only $170 in 1992 Dollars (as of 1994), the sixth lowest in the world.

and economic instability of the 1970's brought a decline of about 20% in production agriculture, but a much larger decline in agribusiness.[60]

The largest entrepreneurial class, the Asians, were expelled in the 1970's, as part of Idi Amin's political agenda. Many educated Ugandans (entrepreneurs and others) fled the country during these years and have not returned. However, the shortages of essential goods in the 1970's and the token size of civil service salaries during the 1980's, including their limited potential for growth, have stimulated self-employment and engendered entrepreneurship as a survival skill.

Industrial activity is dominated by tobacco and beverages, both of which account for (26%); food processing (21%); textiles and clothing (16%); and chemicals, paint, and soap (12%). Small-scale industry has and continues to be dominated by the clothing industry, but includes milling, furniture making, and general workshops.[61]

The formal industrial sector developed as a small, import-substituting sector. It is dominated by the private sector, and small-scale enterprises; very few large-scale private businesses exist.

Some medium-sized enterprises involved in crop buying and processing or fabrication exist with a stable labor force and formal accounting. But, with the exception of coffee in the South, they are likely to be controlled by Cooperatives or the Government, concentrated in a few old, established district headquarters, and survive through subsidies rather than sales.

In rural Uganda, individual economic survival usually depends on private rather than public enterprise. Family or individual enterprises dominate agriculture, trade, transport, health, etc., and their products are exchanged in virtually unregulated local markets. Although small farmers are often described as belonging to a "subsistence" economy, most of them sell some of their agricultural output, and at least some members of every family will also be involved in agricultural processing and small scale off-farm activities. It would be nearly impossible to accurately estimate the size of these small scale informal activities and the income that they generate.

---

[60]USAID/Uganda. Cooperative Agriculture and Agribusiness Support Project Proposal. Kampala, February, 1988.

[61]Uganda, Republic of. Background to the Budget 1991-92. Ministry of Planning and Economic Development, Kampala, June 1991.

Part of the problem facing private enterprises is that recent Government policy reforms have focused almost exclusively on the policy environment within which entrepreneurs operate--the regulation of markets, extent of price distortion and role of state enterprises, but ignore critically important aspects of their operating situation such as access to infrastructure and services.[62] The Government of Uganda (GOU) is publicizing its desire for the return of skilled expatriates that were expelled from the country in the 1970's during the Amin regime and appears sincere in its intent to return all confiscated properties; limited results have been realized.

5.3 IDENTIFICATION AND ANALYSIS OF IMPORTANT CONSTRAINTS TO FOOD SECURITY

5.3.1 GENERAL CONSTRAINTS FACING PRODUCTION AGRICULTURE

Before 1986, growth in production agriculture was hampered by a series of constraints, i.e., Government control of food and export crop marketing and pricing, inadequate transportation infrastructure and shortage of haulage vehicles, shortages of foreign exchange and unpredictable inflation, physical insecurity, limited research and extension, shortages of agricultural inputs (physical inputs, capital and labor), etc. However, since 1986, many of these constraints have been removed via macroeconomic reforms. Peace and security have been re-established in the Center, South and West; food marketing has been decontrolled; some improvements have been made in the transportation infrastructure between food producing areas and Kampala; an open market for foreign exchange has been established, etc. The main constraints now facing production agriculture relate to the following.

*** Agricultural Research and Extension Services**

The Government-sponsored agricultural research and extension system in Uganda, particularly for food crops, is weak and largely to blame for the limited technology borrowing, adaptation, and dissemination to production agriculture.

The current research network comprises 7 research institutes, 11 stations, 4 regional veterinary laboratories and 65 testing centers. Although Uganda has a long history of crop research with well established research institutes at Kwanda, Namulonge, Serere and Entebbe, food crop research has

[62]Brett, E., Providing for the Rural Poor: Institutional Decay and Transformation in Uganda. Institute of Development Studies, Research Report No. 23, Sussex, September, 1992.

received little attention. Having suffered widespread disruption and destruction, the country's agricultural research capability requires reconstruction so that it can serve the existing national needs.

Although aided by the Ministry of Commerce, Industry and Cooperatives, and the Ministry of Water, Energy, Minerals and Environment Protection, the Ministry of Agriculture, Animal Industries and Fisheries (MAAIF) is the key Government agency responsible for providing agricultural extension services. But in 1990, funding allocations of $350 per field staff person per year, equivalent to $29 per month, were too low.[63] The bureaucracies of Government agencies charged with supporting farmers in agricultural development are also unresponsive to field-level needs and priorities. Links with the research network are hard to develop, given its centralization around Kampala. Inter-ministerial coordination with the agricultural sector has also been limited. The combination of limited food crop research and inadequate extension has caused a major drag on agricultural performance and food security.

* **Availability of Formal Credit**

Agricultural financing, especially for crop-based production agriculture, is inadequate. Two kinds of credit are provided to agriculture: crop finance for the purchase of the major export crops (coffee, tea, and cotton) and production finance for on-farm investments in improved technology or working capital. Finance for agriculture as a share of monetary GDP has virtually stagnated at 4-8% since the mid-1960's.[64] The only credit available in rural areas, outside of crop finance, has been occasional lines of credit funded by foreign donors, e.g. the African Development Bank--ADB, EU and the Danish International Development Agency--DANIDA. NGOs and savings and credit societies are involved in the provision of quasi-formal finance. Informal financial networks e.g. merchant and trader lending, group-based rotating savings and credit associations, and farmer-to-farmer loans also exist. Moneylenders are another other common source of informal finance in rural areas. The state of Uganda's financial system, particularly its inability to service the needs of production agriculture, has constrained investment in and expansion of the sector and limited food security.

* **Rural Road Transportation Infrastructure**

[63]See Uganda, Agriculture, June 1993.

[64]See Uganda, Agriculture, June 1993.

The road network in Uganda consists of 7,500 km of trunk roads and some 21,000 km of feeder roads. The paved trunk network has been substantially renewed and work continues on main gravel roads. Rural feeder roads remain in a state of disrepair, with an estimated 25% impassable in the rainy season.[65] Yet, the cost of farm output transport to market centers is an important determinant of the performance of and growth in production agriculture. Given the generally poor condition of the rural road network, the route over which most output from production agriculture is transported to market centers, marketing costs and product shrink and loss between producers and traders are high, increasing food prices and undermining food security.

*** Fluidity of the Labor Market**

In rural Uganda, many laborers are also smallholder farmers. They tend to react to changes in the relative profitability of their employment, i.e. self-employment on their farms, versus selling their labor for a wage. This pattern can sometimes introduce an element of unpredictability in the use of labor on-farm and therefore farm output. If smallholders realize that offering their labor for sale will be relatively more profitable than self-employment, many of them are likely to enter the local market for casual daily labor at about the same time during the agricultural calendar. An oversupply of labor is likely, and the wage rate could drop. If they view the situation to the contrary, small farmers may be more involved in self-employment on their farms, thereby limiting rural labor supply for hire and promoting a hike in the wage rate due to labor shortage. In the latter situation, only larger farmers with more cash can pay the relatively higher/scarcity wages, and as such, can obtain timely service to produce food and cash crops. If it prevails, the latter pattern carries negative implications for yields in Uganda's largely labor intensive smallholder production agriculture and food security.

*** Land Tenure Insecurity and the Absence of Freehold Tenure**

Land tenure systems across Uganda feature a mix of traditional practice, colonial regulations, and post-colonial legislation. Prior to the Land Reform Decree of 1975, four main types of land tenure existed: customary tenure, freeholds (ordinary and adjudicated), and Mailo tenure[66] (owners and

[65]See Uganda, Agriculture, June 1993.

[66]This refers to a system of private individual freehold tenure that was introduced in Buganda in the 1900's.

tenants) and leaseholds.[67] In 1975, the Government of Idi Amin promulgated a Land Reform Decree that nationalized all land and introduced a uniform system of tenure.

By not providing freehold tenure as a national system, this decree has created a number of direct and indirect problems for agriculture and food security. First, without a freehold title, investments in and sound management of land are discouraged. Second, the inability of farmers to use land as collateral for credit (via the possession of freehold titles) has restricted long-term capital investments on land and agriculture.

Under the aegis of the Government's Agriculture Policy Committee, studies and workshops have been held to debate and map out strategies based on proposals for reforming the 1975 Land Decree, so as to replace it with one based on a land system which provides for national freehold tenure. This proposal has been approved by the Agriculture Policy Committee and forwarded to the Ministry of Lands, Housing and Urban Development for review, prior to submission to cabinet.

5.3.2 CONSTRAINTS TO DEVELOPMENT OF THE PRIVATE SECTOR

Some of the difficulties confronted today by businesses (limited business skills and private capital, to name a few) stem from the existence of political instability and policy proclamations during 1971-1986 when an anti-private sector policy (especially for Asians who were also Ugandan citizens) was prevalent. As a result, Ugandan entrepreneurs turned to the state to enforce controls which would strengthen their position vis a vis that of their Asian and expatriate competitors. Uganda's private sector (both formal and informal) faces a number of constraints to its growth and development. The most important of these constraints are discussed below. Private sector agribusinesses will benefit immensely from their elimination.

*** Adverse Government Regulatory Environment**

Several features of Uganda's business regulatory environment are not conducive to private sector growth. For instance, the state tax and licensing system imposes heavy costs on firms, particularly when they are small. The regressive tax system undermines small formal sector producers and the

[67]Makerere Institute of Social Research and Land tenure Center, University of Wisconsin, Land Tenure and Agricultural development in Uganda, January 1989.

system under which businesses pay a substantial lump sum tax in advance of beginning production not only erodes start-up capital, but also discourages private sector led growth.

Although the 1987 reforms to the monetary system (including substantial devaluation and overhaul of Government policies) were all positive factors, the overvaluation of the Ugandan Shilling until approximately 1991, when it was floated, encouraged imports by making them artificially cheap. Overvaluation penalizes exports, which are artificially overpriced in foreign currency terms. Domestic producers face price pressure from foreign goods, unless, unless tariffs are imposed to offset the exchange rate advantage of imports.

*** Limited Formal Credit**

Although availability of finance is not so much a problem compared with actual opportunities, formal and informal lending to the private sector is limited. The limited availability and high cost of foreign exchange for import of machinery and intermediate production goods also present serious constraints to agribusiness and overall private sector development. This is an even more serious obstacle for new businesses than for existing ones. The availability and interest cost of local currency to pay domestic operating costs and to buy foreign exchange for imports presents a very serious problem for many agribusinesses.

*** Limited Business Management Skills**

In general, unskilled labor is plentiful and cheap, but specialized skills are in short supply in Uganda. Obtaining trained management and skilled workers is a problem particularly for cooperatives, but such a problem is largely overshadowed by governance. The shortage of business management skills is a leading constraint to private enterprise development. Such skills are critical to stimulate new business start-ups and for existing businesses' survival in today's highly competitive business environments.

*** Infrastructural Inadequacies**

In Uganda, the majority of modern private sector business investments are being made in Entebee and the Kampala/Jinja complex. Thus, private rural enterprise depends on highly localized demand for cheap products protected by poor access and thin markets, or on services associated directly with agriculture. Localized demand may be protected but it offers no opportunities for achieving scale economies and business growth. The main danger is that most of the income from production

agriculture-based services and markets is generally not spent on local products, but on products brought in from Kampala, or even overseas. Better services (electricity, communications, road and storage infrastructure, etc.), which reduce the inequalities between established (usually urban) trade centers and the more rural areas will encourage private investment in rural centers. It may also permit some firms to expand and serve larger areas.

Most rural areas are poor and have been unable to stimulate the public and private investments needed to retain current businesses and attract others from the outside, and in so doing, reduce the inequalities between poor rural areas and their developed counterparts. State support for private sector development is poor even in main urban centers.

Although the main trunk roads have been greatly improved, most rural feeder roads in Uganda are still in a poor state. Telephone communication is poor and costly. Electric power failures are common. This situation makes it difficult for private firms (especially small ones) to operate efficiently. Further, without basic infrastructural and related services, existing rural enterprises are limited to providing low-cost, low-quality services to poor and undiscriminating local consumers, instead of increasing their levels of skill and reliability so as to produce for new, more specialized urban markets which demand higher levels of quality control and design.

*** Limited Availability of and Access to Business Information**

Partly due to anti-private sector Government policies of the 1970's and partly because of the absence of effective and efficient sectoral advocacy groups, broad based dissemination of business information is limited in Uganda. In countries where it is available, such information provides local entrepreneurs with updated ideas and developments regarding business enhancement possibilities, and opportunities for business start-ups or expansions. It could also inform the business community of entrepreneurial lessons and success stories in other countries.

5.4 PRELIMINARY PRIORITIZATION OF CONSTRAINT FACTORS (TO BE COMPLETED IN PRIMARY RESEARCH)

As explained above, both production agriculture and the private sector face serious constraints that limit their ability to initiate, develop, grow, sustain themselves and therefore contribute significantly to enhancing food security. Such constraints are prioritized below on the basis of the magnitude of the positive impact from their alleviation.

5.4.1 CONSTRAINTS TO INCREASED AGRICULTURAL PRODUCTION

(i) Limited relevant agricultural research and extension services

(ii) Little available institutional credit

(iii) Inadequate rural road/transportation infrastructure

(iv) Land tenure insecurity and the absence of freehold tenure

5.4.2 CONSTRAINTS TO DEVELOPMENT OF THE PRIVATE SECTOR

(i) Infrastructural inadequacies

(ii) Limited institutional credit

(iii) Limited business management and entrepreneurial skills

(iv) Limited availability of and access to business information

(v) Adverse government regulatory environment

5.5 PRIORITY CONSTRAINTS WHICH THE PRIVATE SECTOR CAN HELP ALLEVIATE (PRELIMINARY--TO BE COMPLETED IN PRIMARY RESEARCH)

(i) Upgrading input supply and distribution services to both production agriculture and agribusinesses

(ii) Improving marketing of output from production agriculture and agribusinesses locally and via cross border trade

(iii) Stimulating provision of investment and working capital

(iv) Breaking barriers to agribusiness information dissemination

(iv) Improving skills in certain aspects of extension agronomy and agribusiness management

5.6 CONSTRAINTS TO PRIVATE SECTOR PARTICIPATION IN FOOD SECURITY ENHANCEMENT (PRELIMINARY--TO BE COMPLETED IN PRIMARY RESEARCH)

Given the dynamism and national commitment of its entrepreneurs, the private sector in Uganda might have participated more actively in food security enhancement than it currently does, if not for a number of structural and policy constraints. These restrictions are described below.

* Credit Policy Bias Against Private Traders

The lack of funds for investment in the private grain trade is a major constraint to private sector participation in enhancing food security, especially for small traders who lack both formal and informal credit. The purchase of trucks and construction of stores for use in the grain trade require large amounts of investment capital, which most traders cannot finance from their own savings.[68] This discourages private sector interest and entry in the grain trade.

* Poor Road Infrastructure

The poor quality of roads (especially from rural to urban/market centers) hampers transportation of grain from surplus to deficit regions. Excessive transport costs due to poor quality roads contribute to much lower producer prices in remote areas and higher consumer prices in urban markets. In combination, these problems create a disincentive for private sector participation in food security enhancement. However, if traders can buy low and pass on high marketing costs to consumers, profit-making opportunities will exist. But with such low consumer incomes, passing on such costs becomes problematic.

* Limited Access to Market Information on the Profitability of the Grain Trade

Without telephone services and/or other forms of communication with urban-based grain traders, traders living and operating in rural areas can hardly be aware of the potential benefits of arbitrage

[68]Most traders do not own their own trucks. Others (specialized transporters) often make this investment.

in the grain trade. This partly accounts for the difficulty that the private sector faces in being involved in the grain trade, and therefore food security enhancement.

*** Limited Political Support for Private Sector Involvement in Food Security Enhancement**

As part of Idi Amin's Government policies, widespread anti-private sector bias prevailed in Uganda during the 1970's. This led to a mass exodus, among others, of private investment and entrepreneurs who were either directly or indirectly involved in ventures aimed at food security enhancement. Although the effects of these policies are gradually waning away, it will take time for the impact to fully disappear.

*** Parastatal Domination of the Grain Trade**

Especially prior to the economic reforms of 1986, grain marketing was dominated by the national grain parastatal, which crowded out private entrepreneurs. This not only caused loss of an opportunity through which the private sector's human and infrastructural capacity to manage food crises could have been improved, but it also discouraged participation of the private sector in grain trade and private sector-led food security enhancement. However, for a growing number of private Ugandan farmers and traders, food insecurity problems in the region are bringing increased food export and income opportunities. The country's main food exports, maize and beans, have grown rapidly over the last few years. More private Ugandan farmers are planting maize as a cash crop in response to growing regional demand as local, regional, and international traders actively seek out supplies and markets.[69]

5.7 EXAMPLES OF HOW THE PRIVATE SECTOR CAN HELP ALLEVIATE PRIORITY CONSTRAINTS (PRELIMINARY--TO BE COMPLETED IN PRIMARY RESEARCH)

(i) Improving the quality of services in those areas in which the private sector is already involved, e.g. transportation and distribution. Some form of Government/donor assistance will be required in planning, design etc.

(ii) Expanding the memberships of existing rotating credit associations or create new ones to service the working/start-up capital needs of businesses.

[69]See FEWS, Oct. 23, 1995.

(iii) Strengthening of sectoral advocacy groups and associations by training of association leaders and undertaking member needs and satisfaction surveys. Working more closely with policy makers in problem identification and planning for sustainable resolution of such problems. Better dialogue and experience sharing with in-country counterparts and Ugandan businessmen living in neighboring countries could also be used to disseminate information. This can be undertaken directly between individuals and through sectoral associations. In combination, these activities can help private businesses be more creative and innovative in identifying business opportunities. Given its successes and experiences over the years, the Ugandan Grain Exporters Association (UGEA) could collaborate with and offer direction and guidance to its counterparts in Kenya (where politics has severely constrained the performance of the grain export/import business) and other countries in the Horn (if similar groups exist there). The "voice" of the UGEA could be enhanced by the formation of an exporters' and growers' subassociation in a geographic area that has high production potential.[70] This would function as a demonstration/model of how producers, agricultural R&D, the extension service, and exporters could cooperate on an export market-focused project.

(iv) Borrowing and adapting improved foreign technology to enhance the limited, existing local capacity and experience in extension agronomy and management of small scale businesses by conducting training of groups of private individuals, especially those living in remote rural areas.

5.8 IDENTIFY SPECIFIC COMPANIES INTERESTED IN PARTICIPATION & DETERMINE FORM OF POTENTIAL INVOLVEMENT

---To be done in-country.

5.9 CONCLUSIONS (PRELIMINARY AND BASED ON SECONDARY RESEARCH ONLY)

With agriculture accounting for 51% of GDP, generating 90% of export earnings, employing at least 80% of the labor force, and providing a raw material base for agribusiness, the role of production agriculture development in any development or regional food security strategy for Uganda critical.

[70]Maxwell, Jim and Richard Abbott. Innovative Approaches to Agribusiness Development in Sub-Saharan Africa, Vol. 2: East African Report. AEP-936-5457, August 1995.

While still recovering from years of political instability, Ugandan food production has the potential to increase dramatically over the next decade and significantly contribute to increased regional food exports, improved economic development in Uganda, and enhanced food security in the Greater Horn of Africa. The potential regional market for Ugandan food exports is vast and growing (Zaire, Kenya, Sudan, Tanzania, Rwanda, Burundi, etc.), especially in light of the projected gap between domestic production and consumption requirements in the GHA--an increase of 100% from 8 to 16 million MT between 1995 and 2000.[71]

This emphasis on agriculture does not mean that Uganda should not push for industrialization, although this should not be done at the expense of agriculture. Instead, emphasis should shift from food production for the domestic market, to production of raw materials for agribusinesses to process and/or export. In light of this framework, a two-pronged agricultural development strategy is proposed. In the short term, focus should be on increasing agricultural exports in traditional cash crops (coffee, cotton, tea) as rapidly as possible. Since Uganda is following a Non Traditional Agricultural Export (NTAE) strategy, it should concentrate on the least investment-intensive non-traditional agricultural exports (sesame seed, beans, maize, other cereals, hides and skins, fish, and fruits and vegetables). In the medium to long term, far-reaching measures should be implemented to diversify agricultural exports and improve technology generation and dissemination.

In order to begin the transition to increased private sector participation in food security enhancement, the GOU should nurture an effective, problem-solving oriented partnership between the public and private sectors rather than the largely adversarial relationship between the two that has prevailed over the past few decades. Such a partnership will, among other things, provide a forum for private sector problems to be aired, resolved, and followed-up.

Although rejection of state intervention, contempt for state enterprise, and advocacy for an "open economy" are pervasive among businessmen, especially those based in Kampala, it is important to note that some of this business class which now rejects the state has depended on direct state assistance (subsidies) from their firms' inceptions. It is therefore critical to not simply wish away Government assistance (especially in providing an enabling environment) while privatization and private sector-led growth continue.

[71]See FEWS, Oct. 23, 1995.

As a result of economic reforms, the roles of parastatals and marketing boards are being redefined and diminished. The need to encourage the emergence of a strong and sustainable private sector grain marketing system and to provide increased production incentives to farmers is becoming more apparent, but these changes may also carry unintended results. First, with the disappearance of parastatal boards, information on grain stocks (e.g. quantities available for export and other uses) and cereal markets is more difficult to obtain. Although grain exports have risen dramatically over the past few years (largely due to increased private framer/trader participation) in the wake of the decontrol of parastatal grain marketing, there is uncertainty about the private sector's ability/capacity to sustain this expanded market role. Finally, monitoring of the volume of cross-border trade (an activity in which the parastatal grain board was involved) is even more difficult now that the trade is carried out by the private sector, following the reduced role of the grain marketing parastatal. The severity of this problem depends on the number of major border crossing points and the volume which crosses per shipment.

6.0 Cross-Cutting Issues on the Role of the Private Sector in Alleviating Priority Constraints to Food Security in the GHA


Image Not
Available

Appendix I - Kenya Commodity Markets

1.0 Kenya Commodity Market Profiles

1.1 Maize Marketing

Since maize dominates food considerations in Kenya, supplying 40-45% of the country's total consumption of calories[72], the distortionary effects of Government controlled maize marketing illustrate the harmful effects that inefficient public enterprises in Kenya have had on food security. Prior to 1994, the grain marketing parastatal, National Cereals Produce Marketing Board (NCPB), purchased maize from farmers at pre-determined producer prices, which was then sold to millers and traders, again at a set pan-territorial price. Maize flour was sold at an official consumer price (guaranteeing large-scale millers what usually amounted to a very lucrative margin). Unfortunately, the inefficiencies of the NCPB (and policies maintaining its monopsony) have adversely impacted on food security in Kenya for several reasons:

* There is no evidence that price stability, a stated objective of the NCPB, has been achieved over the last decade. The NCPB often held large stocks or exported maize even though food prices were skyrocketing. While maize imports have compensated for shortfalls in poor agricultural years, they have not been large or timely enough to ensure price stability. In fact, price instability has been worse in urban areas, supposedly the primary beneficiaries of Government intervention in grain marketing.[73]

* Controls on the inter-district movement of maize (removed fully only in December 1993) aggravated the effects of drought on food security.[74] Movement controls limited most private trade to short distances and small shipment sizes. A key impact of maize market liberalization that is just starting to be seen is a reduction in the costs of long-distance transport, as shipment

[72]World Bank. Kenya Poverty Assessment. Population and Human Resources Division, Eastern Africa Department, Africa Region. Report No. 13152-KE, July, 1994.

[73]See World Bank, July, 1994.

[74]Argwings-Kodhek, G. Toward a Framework for Maize Sector Policy in Kenya: Issues, Options, and Consequences. In Proceedings of the Conference on Market Reforms, Agricultural Production, and Food Security, sponsored by Egerton University, PAM/KMDP. Nairobi, June, 1994.

sizes increase and administrative barriers to trade (e.g. bribes at road blocks) disappear.[75] Furthermore, during the period 1992 and 1994, price differentials among trading regions narrowed, showing evidence of increasing private transport of maize.[76]

* The cost of NCPB's operations has been extremely high, resulting primarily from the maintenance of unnecessarily high stocks of grain, employment of a large staff, and operation of an excessive number of buying centers. The NCPB's deficit as a percentage of Government's recurrent expenditure was as high as 2% in 1991/92[77]. As a comparison, public spending on child nutrition programs was 33% as much as the deficit. If private agents had been allowed to handle much of this trade, the savings in expenditures could have gone to increasing public expenditures on health, education and nutrition programs.

* The pre-reform milling industry was dominated by large-scale units operating under state-mandated milling quotas, located mainly in urban areas in close proximity to NCPB depots (far from the production areas), and with low capacity utilization rates. As a consequence, smaller-scale, lower cost millers producing a lower quality but cheaper maize meal were unable to take advantage of the large and growing urban demand for maize meal. Flour mills are now allowed to buy directly from the market (although the NCPB has, on occasion, undercut private trade by offering maize at a subsidized price to millers). Since liberalization, there has been an increase in the number of small-scale millers in urban areas[78], some large-scale millers are broadening the type of grain they mill (milling less refined flour) and increasing capacity utilization[79], and relative long-distance shipment of milled maize to inter-regional transport of unprocessed grain is expected to rise.

---

[75]Were Omamo, S. Maize Production, Consumption, and Storage in Kenya under Market Reform: Principal Findings of the PAM/KMDP and Implications for Further Research. Paper presented at a Conference entitled Towards 2000: Improving Agricultural Performance, sponsored by Egerton University, PAM/KMDP. Nairobi, September 1995.

[76]Sasaki, N. Maize Market Liberalization, Seasonal Prices, and Private Sector Storage. Manuscript, University of Arizona, 1995.

[77]See World Bank, July, 1994.

[78]Kristjanson, P., et al. Agribusiness Sub-sector Study. Mwaniki Associates, for USAID/Kenya, Jan., 1995.

[79]See Nyoro, J. Sept. 1995.

* The GOK, through NCPB, effectively subsidized grain storage for many years through its pan-territorial pricing policy[80], absorbing the costs of handling, grading, and transporting maize that it sold to the sifted flour millers (approximately 30 companies). Thus the mills are located in urban areas, far from the source of production, with more than 50% of the capacity of sifted maize mills in Nairobi and Mombasa. Controlled (and lucrative) markups led to a tremendous over-investment in milling capacity in the formal sector. At the same time, there is a shortage of rural and on-farm storage facilities, particularly among large farms. Full liberalization (e.g. a reduced NCPB role in the market) has potentially significant benefits to consumers. As this over-capacity is reduced, mills and storage facilities will relocate closer to producing areas, thereby lowering transportation and marketing costs (as flour is less costly to transport than the grain that is processed into flour).

According to the GOK's Policy Framework Paper for 1994-96, the NCPB's new role in the maize market will be limited to managing a strategic grain reserve. NCPB will buy maize at no more than the export parity price, and sell at no more than the import parity price. However, the high cost to taxpayers continues. After a good 1994/95 maize crop, the NCPB is trying to export its current stock to countries in Southern Africa that are experiencing drought, but at a selling price that is lower than that paid to Kenyan producers. Movement towards a restructuring of the Board is slow and fraught with political overtones.

It is important to realize that 70% of Kenya's maize is produced by small holders. However, large farmers have been the major suppliers of the NCPB. Small holders produce mainly for own consumption and a flourishing informal market exists, despite past policy restrictions. Thus in terms of increasing maize output, many challenges exist, including the need to reduce public expenditures via an inefficient parastatal. The World Bank attributes the poor performance of maize production in Kenya, and the resulting food insecurity, to the following factors (besides drought).[81]

* Most maize varieties currently used are based on hybrids developed in the early 1960's and refined with new releases over the years. However, the average small farmer's yield may be as little as 20% of those achieved on research stations. The main factors accounting for the

[80]This refers to Government administered prices that are identical all over the regions and or national territories of the country.

[81]See World Bank, July, 1994.

difference are fertilizer application rates and husbandry practices, but new varieties adopted to farmer conditions (e.g., inter cropped maize) and lower rainfall are needed.

* There have been recurrent problems with access to high quality seeds and the ability of the parastatal Kenya Seed Corporation to deliver adequate supplies of high quality seeds in all the varieties that the farmers want.

* The current return on fertilizer use for small holders is in many cases too low to offset the additional costs and risks inherent in applying them. Fertilizer recommendations need to be updated and made much more location-specific, and further work is needed to raise the response per unit of fertilizer. While the fertilizer market has been liberalized, the establishment of a competitive and efficient private agricultural input sector is still underway, and improvements in the marketing chain that will lower costs further are needed.

1.2 Wheat Marketing

Kenya produces less than 50% of its domestic wheat requirements, largely because of static acreage and low yields. In 1992, millers were allowed to buy wheat from any local or international source. Before this, all imported wheat was supplied by the NCPB. NCPB however continues to set pan-territorial and pan-seasonal producer prices. In 1994, these prices were higher than those offered by private traders. Millers responded by buying cheaper imported wheat, leading to delayed producer payments from the NCPB, which could not sell the wheat to millers. In June 1995, an ad-valorem levy was imposed on wheat imports to protect domestic producers. Wheat exports remain tightly controlled. Liberalization has resulted in increased capacity utilization of large-scale mills.[82] Wheat milling costs have declined due to a reduction in losses brought about by poor quality wheat and underweight consignments, as well as lower working capital requirements, since millers are now able to obtain wheat from local and international suppliers on credit.

1.3 Rice Marketing

Rice is a relatively minor crop in Kenya and imports are probably more important than exports. Over the past several years, the National Irrigation Board fully controlled production, procurement and

[82]See Nyoro, J., Sept. 1995.

processing of domestic rice, 90% of which is grown under irrigation by tenant farmers. Milled rice is sold to wholesalers via the NCPB and the Kenya National Trading Corporation (KNTC).[83]

1.4 Dairy Marketing

Until recently, an inefficient, high-cost marketing structure and an inflexible pricing system characterized the dairy sector. Kenya Cooperative Creameries (KCC) and its 12 constituent processing plants dominate dairy marketing. Liberalization of the milk market began in 1992 with two principal reforms: a) expansion of the private sector by encouraging dairy cooperatives and self-help groups to diversify their activities into milk processing and marketing, and by promoting participation of individuals and private firms; b) deregulation of producer and consumer prices. The timing of liberalization was a direct policy reaction to the state of affairs in the industry at the time. Since liberalization, about 10 mini-dairies have been established (with capacities of 5,000-20,000 liters/day), along with numerous small-scale milk processors (with capacities ranging between 300-1000 liters of milk/day). Many individuals have entered the new, highly lucrative trade in raw milk, raising regulatory issues of sanitation and safety. The status of KCC in the newly liberalized environment is still unclear.

1.5 Road Transport/Private Sector Grain Marketing

Transport system inadequacies distort the efficient regional distribution of food crops in Kenya. In most settled areas of the country, rural road networks that link farm households to markets and, occasionally, employment opportunities, do exist, but are in serious need of repair.

The transition from parastatal to private sector grain marketing in 1994 was quite sudden. The private sector did not have the capacity (especially storage) to effectively take over the marketing functions. This led to limited grain off-take, depressed producer prices and loss of producer income, thereby raising serious questions about the sustainability of the transition.

[83]Government of Kenya. Grain Pricing Study: Cereals Sector Reform Program. Final Report, Vol II, Nairobi, May 1990.

Appendix II - Eritrea

1.0 Eritrea

1.1 Introduction

Eritrea's economy is largely agrarian, with agriculture constituting 33% of GDP in a "normal" year and absorbing the bulk of the labor force (72-80%). Within the agricultural sector, crop production is estimated to be the most dominant sub sector (75%), followed by agro forestry (16%), livestock (8%) and fishing (1%).

Unfortunately, Eritrea is almost perennially food insecure.[84] This has made Eritrea one of the highest per capita food aid recipients in the world--71kg/capita in 1993. National food shortages are a chronic phenomenon, in part because of Eritrea's structural grain deficit and unfavorable climatic conditions. The need to meet Eritrea's food requirements, and especially those of the very poor, attaches great importance to the agricultural sector. Further, the lack of other significant sources of export revenues makes the agricultural sector a logically primary engine of economic growth.

The above suggest complimentarity between agribusiness on the one hand, and food security and overall economic development, on the other. Yet, for agribusiness to thrive, markets must function efficiently, i.e. with limited, if any, distortions.

The Eritrean Government has emphasized the need for food security within the framework of overall growth and agricultural development. Some efforts have been made by Government in this direction. However, the private sector in Eritrea, as is the case with most other countries in the Horn, is faced with a number of similar constraints that impede it playing an effective role in achieving agricultural and food security objectives. Such problems include the absence of a viable Government policy to guide sectoral development, and human capacity limitations in the area.

Eritrea's rich entrepreneurial tradition is one of the strengths of its private sector. As of September 1993, registered and operational food sub sector private and public industrial enterprises represented

[84]The World Bank defines food security as "access by all people at all times to enough food for an active and healthy life."

49% and 14% respectively (63% in total) of all firms in the manufacturing industry.[85] These businesses face a myriad of problems. After the three-decade long war of independence with Ethiopia, most enterprises (agricultural and non-agricultural) suffer from problems such as major shortages of raw materials, spare parts, working capital and foreign exchange; as well as the absence of a fully functional regulatory framework for investment. In spite of its rich entrepreneurial tradition, the potential of Eritrea's private sector has been stifled by the emigration of private sector personnel due to the unsuitable policies of the previous political regime and the war of independence. Another missing element is the lack of seasoned business persons who could provide advise to business constituencies. Additionally, the existing private sector entrepreneurs are lacking in the relevant skills (e.g. agribusiness, management, etc.), required to effectively function as businessmen. In-country Eritrean entrepreneurs are not in close communication with their overseas-based Eritrean counterparts; this would be a useful way to bridge the gap in knowledge about business ideas and practices among entrepreneurs.

1.2 Identification and Analysis of Important Constraints to Food Security

1.2.1 General Constraints Facing Production Agriculture

The problem of domestic food insecurity in Eritrea is the result of a combination of factors that directly or indirectly affect the performance of production agriculture. They can be categorized into institutional, infrastructural and policy, as well as others that are the direct repercussions of the thirty-year long war of independence with Eritrea. These issues are described and analyzed below.

*** Agricultural Support Services and Other Key Production Input Bottlenecks**

The factors discussed below directly or indirectly undermine agricultural productivity levels, impede immediate gains (net farm incomes, and therefore farmers' incentives to produce) in the sector and render agricultural production enterprises unattractive options for private sector undertaking.

(i) Institutional Credit in the Agricultural Sector

Traditional borrowing mechanisms in Eritrea generally take the form of rotational group lending. The main source of institutional credit is the Commercial Bank of Eritrea (CBE), whose current lending

[85]Ministry of Industry and Trade, Eritrea.

practices are largely geared toward traders, because of their relative low-risk and short term needs. Its production agriculture lending is minimal; less than 5% of total credit and predominantly benefits the larger commercial farmers. No lending is made to small holders by the Bank since they are considered high-risk borrowers.[86] NGOs and other donor supported programs such as the Agricultural Rehabilitation Program (ARP) provide most of the credit to agriculture.[87]

Given that 70-80% of the population (mostly rural based small farmers), depends on the production of crops and livestock for income and employment, and the share of agriculture in GDP stood at about 33% in 1994, credit deficiency has, and continues to pose a major threat to agricultural production and domestic (individual and household) food security. Credit is so central to agricultural activity that without it, the average farmer will not be able to acquire improved technology or other inputs (machinery, fertilizer, additional labor, etc) or secure the resources to make other kinds of investments on their holdings, such as supplementing rain-fed irrigation with artificial irrigation. The shortage of credit has also limited the ability of potential private entrepreneurs, including agribusinesses, to secure initial capital for investment in business ventures. It is therefore paramount that sustainable rural financial services be established to enable private farmers, especially small holders, to gain access to working capital.

(ii) Extension and Training Inadequacies

Notwithstanding its institutional capacity constraints, the Ministry of Agriculture is the sole Government Ministry responsible for furnishing extension and research services. Its structure has recently been under review, but its overall research and extension capacity is small (approximately 300-500 rural households per extension agent) and weak.[88] This has limited the quantity and quality of improved technology that is being extended, thereby hindering the understanding and appreciation of fundamental principles of agronomic management among most who are engaged in agricultural

[86]World Bank. Eritrea Options and Strategies for Growth. Report 12930-ER, Vol I. Washington, D.C., May 12, 1994.

[87]Food and Agriculture Organization of the United Nations (FAO). Eritrea Agricultural Sector Review and Project Identification, Rome, April 22, 1994.

[88]See FAO, April 1994.

production. Through the direct and indirect linkages of extension agronomy with farm productivity and incomes, this factor is partly responsible for the relatively low yields per hectare in Eritrean agriculture compared with most other countries in the Horn. Some NGOs supplement the Ministry's efforts in agricultural extension work, but no significant private sector work in this area exists.

(iii) Problems Related to Input Supply, Distribution, Cost, and Use

Agricultural input supply and distribution is an important responsibility of the Ministry of Agriculture, although it lacks the required capacity to do so efficiently and effectively. NGO's have assisted in supplying and distributing inputs to agricultural projects, but activities of the private sector in this area have mainly been limited to transporting inputs on contract with either Government or NGO's. Encouraging signs of private sector revival among traders and transporters exist. Unfortunately, this area is still effected by the war of independence with Ethiopia, policies of the previous regime, and a small private sector to take over input supply, or perhaps, any other Government functions in this area.

Given the poor state of the agricultural sector after decades of war and the urgent need to boost agricultural production, input supply by the Ministry of Agriculture consisted, in 1992, mostly of free seed distribution for food crops, and subsidized sale of fertilizer (583 tons), pesticides, farm tools and implements, etc. Early in 1993, efforts were made to reduce or phase out free and subsidized input supply, although fertilizer subsidies still amounted to about 50% of the economic price.[89] Revenue from sales of inputs has been deposited in a special account to be used for financing future input procurement through private traders.

The use of pesticides, drought-resistant fast maturing crop varieties, etc. by farmers is limited, especially on small farm holdings, partly due to extension capacity limitations, but also poor roads, the inability of farmers to pay, and on-farm storage and distribution capacity limitations. Distribution of fertilizers is limited. Inorganic fertilizer utilization is low. This is partly owing to low incomes and farmers' risk-aversity which translates into their reluctance to incur a bigger loss in the event of crop failure.[90] Another factor that limits use of improved/relatively more expensive agricultural inputs is limited affordability caused by low farm gate prices

[89]See FAO, April 1994.

[90]International Monetary Fund (IMF). Recent Economic Developments in Eritrea, November 28, 1994.

All other things being equal, timely and cost-effective agricultural input supply is clearly the engine for successful and profitable agriculture, therefore increased food output. Government intervention in this area carries not only negative budgetary implications, but also limits the development of the private sector which can undertake these same tasks perhaps even with increased efficiency.

(iv) Soil Erosion/Conservation Problems

Land is one of Eritrea's most abundant resources, but the proportion of land that is currently being productively utilized is limited. Some 3.2 million hectares, equivalent to 26% of the total land area are estimated to be suitable for agricultural use, yet, only 395,000 hectares (12%) are currently under cultivation.[91]

While overall availability does not appear to be a constraint to future agricultural growth, the increasing degradation of the land in certain areas is a concern. The lowlands are affected to some extent by gullying of vertisols and wind erosion. The area of greatest concern is the highland zone where most of the population lives, and where topsoil and subsequent soil fertility loss threatens to undermine future attempts to rehabilitate the agricultural sector in these areas.[92] Reliable data on the extent and magnitude of soil erosion are unavailable, but conservative estimates from work on a soil conservation project in Hamasien Province suggest that on most rain-fed agricultural lands, soil erosion losses have averaged at least 15 MT per hectare annually, equivalent to 4.5cm of top soil over a 50-year period.[93]

It is challenging to quantify the direct negative effects of deteriorating land quality on the private sector and food security, because, fortunately, a less than substantial percentage of available topsoil is involved. It is noteworthy however that such a trend could limit productivity and yields, increase production costs, minimize farm incomes, lower net profitability and render crop production enterprises unattractive to the private sector. Further, declining productivity could create a disincentive for long term investments on such land. Clearly, lower land/soil quality will undermine food security.

[91]See IMF, Nov. 1994.

[92]See World Bank, May 1994.

[93]See World Bank, May 1994.

* **Limited Cross Border Trade**

Eritrea is involved with very limited cross border agricultural trade. In view of its historical grain deficit, it is paramount to domestic food security that effective and functioning trading networks with its counterparts in the Horn and/or in Southern Africa be put in place. This is important because in recent years, a regional complimentarity in food security between Eastern and Southern Africa has been identified whereby poor crop production in Southern Africa coincided with good production and bumper harvests in Eastern Africa.[94] In light of this, during periods of bumper harvests in Eritrea (occurring largely in the South and when the weather is good), and therefore food surpluses, excess grains could be sold for cash to neighbors in the Horn that are in need, and/or in Southern Africa. In food deficit years, grains could also be purchased from neighbors across the border and/or from Southern Africa.

Eritrea is a member of the Common Market for Eastern and Southern Africa (COMESA), which offers preferential terms of trade among its members. However, the benefits from membership are still to be fully realized. Eritrea and Ethiopia have recently established a free trade area, although many question its applicability. Unfortunately, not much commercial activity is seen on the Asmara-Adi Caieh road towards the Ethiopian border. On the contrary, much commercial activity is seen along the Eritrean border with the Sudan, perhaps due to the large Eritrean population living in the Sudan. Existing and potential opportunities for cross-border trade should be developed by Government by providing the necessary policy, institutional, and infrastructural environment in close consultation with the private sector. If cross border trade is optimized, it could, in years of bumper harvests, open additional market opportunities and minimize the potential for income losses to the private sector from spoilage of agricultural and food items after internal food requirements have been met and/or immediate domestic markets are non-existent as occurs from time to time in the South. This risk has created a disincentive for some private sector participation in agriculture and has therefore impacted negatively on food security. This risk is important in view of the limited skills and capital base of the private sector.

* **Weak Export Base and a Huge Dependency on Imports**

[94]Famine Early Warning System (FEWS) Bulletin, AFR/95-09, November 16, 1995.

Eritrea's traditional agricultural exports of beef, mutton, leather, citrus fruits and cotton are limited, and are marginally competitive in regional markets. Export expansion is a critical policy option which could create additional private sector entrepreneurial opportunities, generate more private capital which may be invested directly in agriculture and agribusinesses and assist in enhancing domestic food security. Further, Eritrea has a small domestic market. It is important therefore that additional production be complemented by increased real incomes and real effective local demand. In the absence of such local demand capacity, the only other option is the export market. The country's inclination toward huge consumer goods imports and limited restraints on import demand has led to a large foreign currency deficit, estimated at about 55-75% of GDP in 1993 and 1994.[95] If left unchecked, this could cause more serious damage to balance of payments performance than it currently does.

The fishing sector enjoys considerable potential for development in light of the country's ideal location on the Red Sea and approximately 60,000 square kilometers of exclusive fishing zone with a huge diversity of fish and other marine products. In spite of a potentially sustainable yield of 50,000-70,000 tons, harvesting for local consumption and export are insignificant. The lack of private/public sector capital and infrastructure, problems related to export linkages, the lack of interest in fish consumption as part of the national diet, and the private sector failure to understand the profit potential of fishing, all account for this.[96]

Currently, there is a considerable amount of informal trade by Eritrean fishermen who sell their catch directly across the Red Sea instead of bringing it on-shore in Eritrea. Even though fisheries activities were disrupted during the during the prolonged conflict, the marine resource stock remained, and could only have improved from lack of sustained fishing pressure.

*** Undiversified Food Crop Production Base**

Eritrea's food crop production base centers around a limited number of staples. This could result from a lack of national dietary variability that is in turn prompted by traditional food aid patterns, and limited food variety availability. For instance, vegetables are not consumed in any significant quantity and fish consumption is not traditional. However, the food production base can be diversified to

[95]World Bank and Government of Eritrea estimates.

[96]See IMF, Nov. 1994.

include crops like oilseeds and horticultural crops as well as encouraging increased utilization of fish in the diet as a source of animal protein. Although the oilseeds sub sector is underdeveloped, the crop represents the biggest generator of income in the rural areas. Most oilseeds are hardy, rain-fed and fast-growing (3 months). Like horticultural crops, oilseeds can be exported to earn foreign exchange. On the assumption that food production activities are supply driven, a more diversified food production base is likely to broaden market opportunities for private entrepreneurs. The potential profitability of food production enterprises will serve as the inducement for increased private sector involvement in this area. Further, in the event of crop failure, a diversified food production base could be the sole opportunity for some form of marginal food security.

*** Government's Pricing Policies and Slow Pace of Privatization**

As noted earlier, the Government of Eritrea significantly intervenes in the agricultural and food sectors. The Ministry of Agriculture continues to operate a number of state farms and agribusiness facilities (dairy, meat, poultry, tanneries, animal feed, etc) inherited from the previous regime, and to subsidize the distribution of certain production inputs. In 1991-92, it distributed inputs to farmers 100% free; in 1993, a marketing and credit office in the Ministry of Agriculture was opened to provide credit for oxen and water pumps; in 1993, the Ministry sold small implements and fertilizers at cost; in 1994, it distributed inputs free to very poor farmers.

Due largely to huge annual variations in production, there is a high degree of volatility in producer and retail market prices for agricultural and food products. In an effort to stabilize price fluctuations arising from grain surpluses and bumper harvests, the Government has intervened in the marketing system. Contrary to Government's official stance of non-intervention in agricultural output pricing, consumer prices for bread, pasta, fish, beer and soft drinks are controlled. In surplus grain producing areas of the South such as Gash-Setit, prices fell substantially in 1993 due to a bumper harvest in 1992 and the infrastructure based difficulty of accessing markets in grain deficit areas; similarly, grain prices plummeted by 65% from 1992 to 1993.[97] Such massive price fluctuations have formed the basis for Government intervention in agricultural and food markets.

Unfortunately, Government efforts to market agricultural output under contract with private traders has generally resulted in financial losses to Government. For instance, the award of contracts to five

[97]Dommen, Arthur. Report of the OFDA Mission to Eritrea. Agency for International Development/Bureau for Humanitarian Response/Office of Foreign Disaster Assistance, Washington, D.C., October 1994.

traders by Government for the purpose of marketing fresh tomatoes from the Elabered State Farm (80% of which were sold on the Asmara market and 20% on the Keren market)[98], resulted in financial losses to Government of 69,000 Birr ($11,129) in 1992.[99] The choice of relatively inexperienced contractors due in large part to the absence of competitive bidding, could explain losses incurred in this activity. These practices have distorted market conditions and created disincentives for private entrepreneurial intervention.

Delays by the Government of Eritrea to fully relinquish its direct ownership and management of parastatals has, in effect, crowded out the development of a number of private sector initiatives. Its subsidization interventions have also translated to huge annual budgetary strains. Although there has been a trend toward joint ventures with foreign investors, and phasing out subsidies, real forward movement has been minimal. The combination of Government's continued administration of food prices and intervention in the grain marketing system distorts the food market, and creates a disincentive for private sector participation in enhancing food security.

Limited Rural Income Opportunities

Majority of the Eritrean population derive economic livelihood from production agriculture activities. Their over-dependence on subsistence agriculture as a source of income means production agriculture contributes substantially to human welfare in both the rural and other parts of the country. The absence of income generation alternatives has enormously constrained real effective demand, especially in rural areas. Due to the huge dependence on a relatively subsistent and undiversified agricultural and income base, there is a crying need for money to purchase food, especially in food-deficit years. This lack of rural income has clearly hampered private sector investment in the agricultural and food sectors since it is very difficult for the rural population to subsist, not to mention save and develop start-up capital that could be invested in food production or post-harvest activities. It is therefore not surprising that on average, rural households are net purchasers of grain as per household production is less than 100% of the household's consumption requirements.[100]

---

[98]"Elaberet Speaks for Itself." Haddas Eritrea (in Tigrinya), Oct. 15 and 19, 1994.

[99]See FAO, April 1994, Vol II, Annex 7, table 7.

[100]University of Leeds, Centre for Development Studies. Eritrea 1991. A Needs Assessment Study. Leeds, May 1992.

The biggest source of income generation in rural areas promises to be via significant expansion of the underdeveloped oilseeds sub sector. If oilseeds production is established, food security will be enhanced by the generation of rural income on a broad basis, as oilseeds could create a commercial export capacity that is still very limited.

*** Failure by Government to Fully Monetize Food Aid**

Due to a number of factors, including massive annual variability in production, Eritrea is now one of the highest per capita food aid recipients in the world. While Government's policy utterings strongly favor food aid monetization to minimize aid dependency, to date, only small scale monetization has been undertaken by NGOs and the World Food Program (WFP). The modalities for identifying the role, depth and nature of private sector involvement in food aid monetization are still to be formally implemented by Government, although a viable role is perceived. Yet, informal, unofficial and small scale "monetization" of food aid commodities is a daily activity in Eritrea via transactions whereby individual recipients of food aid resell their "surplus" rations in order to purchase other food or non-food household items. The formal monetization of food aid would contribute to food security by increasing the supply of food in markets and re-establishing market activity. The on-going trend of unofficial sale of surplus aid items by individuals suggests private sector interest in a market economy for food aid items and ought to be carefully explored and implemented.

*** Inadequate Road and Telecommunications Infrastructure**

Thirty years of war with Ethiopia have left Eritrea's transport infrastructure, including main roads, in a very bad state. This has limited the development of export-oriented agriculture and industry, seriously constrained domestic supply/demand balancing, increased transport costs and restrained economic growth. Compared with the average for Eastern and Southern Africa, the road density is not only low, but also, only 1,000km of the existing road network are in reasonable condition.[101] Ironically, although the private sector fleet is large and surplus trucking capacity exists, the commercial fleet is underutilized, partly because owners are reluctant to have their trucks driven to badly damaged roads, which unfortunately represent the majority in Eritrea.

The telecommunications system is underdeveloped, in need of substantial rehabilitation, and is also highly unreliable. Most subscribers are in the main cities of Asmara, Massawa and Asseb, leaving

[101]See World Bank, May 1994.

the agricultural producing areas with hardly any form of telecommunication. The inferior quality of the road and telecommunications systems is mainly responsible for the existing and largely historical structural grain deficit amounting to approximately 28% of consumption in Eritrea. For instance, although Barka and Gash-Setit in the North West and South West respectively are generally food-surplus areas, poor roads and communications constrain and sometimes even impede the distribution of this food to other markets, especially in the urban areas, often resulting in a glut at the producer level. Due to the poor quality of rural roads, rural areas are not well served, as drivers refuse to take their trucks over existing poor roads and as such, farmers have great difficulty in marketing their crops. Similarly, with poor telecommunications, it is increasingly difficult to communicate crop surpluses and shortages, as, where and when they may exist. Given the perishability of agricultural commodities, spoilage is significant under such circumstances. The combination of bad roads and poor telecommunications has caused major spoilage of food commodities, loss of investments in agriculture and agribusiness, reduced farm incomes and introduced huge additional risk in the industry. Such risk has discouraged private individuals from investing in agriculture, thereby limiting food production and therefore food security.

* **Limited Rural Market Centers**

Market centers are inadequate in rural Eritrea. The basics of wholesale trade already exist in rural market centers and could be encouraged by appropriate actions from Government, especially with regard to developing the marketing infrastructure. Yet, private trade, particularly formal, wholesale trade is relatively undeveloped. The inadequacy of rural market centers could represent a key factor limiting private sector development and participation in agribusiness because of a potential entrepreneur's uncertainty (rationally), as to where demand and supply should meet, products be sold, and profits realized post-harvest.

Development of rural market centers may be boosted by the successful settlement of 500,000 prospective returnees from Sudan who fled to seek refuge during the war of independence and/or the policies of the previous political regime. Since most of this population represents potential producers and potential consumers, their successful repatriation and full integration into the economy, will, all other things being equal, translate to supplemental production, consumption and purchasing power. Given the country's history of commerce, if these returnees are fully integrated into society and the economy, they may well stimulate private sector involvement in the food sector, especially if the productive capacity already exists.

* **Climatic/Environmental Problems and Variability in Agricultural Production**

Agricultural harvests in Eritrea are primarily determined by natural factors which include erratic rainfall patterns, recurrent droughts, plagues and environmental degradation mostly from human activities. These calamities account for the wide annual variability in agricultural production, and subsequently income, from one year to the other that has become so much a part of the country's legacy. In a period of only one year, 1992-93, production of grain staples plummeted as follows due to unfavorable climatic factors: barley- 16,000MT to 4,000MT, maize- 17,000MT to 6,000MT, millet- 25,000MT to 8,000MT, sorghum- 130,000MT to 51,000MT, and wheat- 10,000MT to 3,000MT.[102] This severe production variability results in substantial risk in agricultural production enterprises to the extent that it has created a disincentive for private entrepreneurs to invest in agriculture. While not much can be done to prevent natural disasters from occurring, significant effort can be made in mitigating their negative impacts on food production via prediction and advance planning, and developing drought or disease/pest resistant varieties.

1.2.2 Constraints to Private Sector Development

Notwithstanding the country's rich tradition of entrepreneurship, private sector development in Eritrea has been hampered by inappropriate policies, as well as structural and other constraints that resulted from the war of independence. These key constraints are discussed below.

*** Limited Access to Credit and Foreign Exchange**

Scarcity of foreign exchange and working capital are typical constraints to agribusiness development, although the private sector in general suffers ineffective formal financial support and inadequate foreign exchange availability. Due to the severe shortage of investment finance, the maximum form of most commercial bank loans and overdrafts is one year. This has hampered the investment process within the private sector. Agribusinesses need credit to obtain raw material inputs from production agriculture, purchase/import equipment, defray costs of other day to day operations and thereby contribute toward food security enhancement. The Government has begun to address the credit problem through the Recovery and Rehabilitation Program aimed at providing essential foreign exchange and inputs to revive industries, but the foreign exchange and working capital needs are still substantial.

*** Poor Level of Technology**

[102]Food and Agriculture Organization of the United Nations. Agrostat Electronic Database. Ongoing.

Prior to the war with Ethiopia, Eritrea had a relatively well developed technological capability. Unfortunately, due to decades of devastating war, equipment in most firms is obsolete. Some spare parts for use in industry are imported while others are produced locally by small workshops or by the factory itself. Such insecurity in the quality, performance and availability of equipment limits capacity utilization of agribusinesses, endangers existing private sector investment, discourages new investment activities and greatly reduces the contribution of agribusinesses to food security. Any further expansion in private sector economic activity would require major purchases of new equipment.

*** War Devastated Infrastructure**

Although Eritrea had a relatively well developed infrastructure in the 1940's, much of it was damaged by decades of war and neglect. The shortage and high cost of electricity are major constraints to private sector development. It is estimated that annual lost production due to electricity shortages is 30 to 50% of lost output in the commercial and industrial sectors.[103] High cost of electricity increases production costs and reduces the competitiveness of Eritrean exports. Damage to the port of Massawa, the closest to potential export markets, has created a major impediment on the port's capacity to support the needs of exporters/private entrepreneurs. Poor road conditions and lack of rural roads have restrained the development of rural markets and reduced linkages between regions. The overall effect of weak infrastructure is high cost of agribusiness operations, lower profitability and returns on investment, higher food prices and less food security.

*** Limited Business Management Skills**

Although a good potential to learn exists, there is a significant shortage of experienced business, marketing and administrative managers. This human capital shortage is the result of Eritrea's anti-private sector policies over the past three decades and the overt neglect of investing in human capacity development. In the absence of skilled business managers, it is difficult for agribusinesses to operate efficiently and effectively, produce and market food items cost-effectively and make any substantive contribution toward enhancing food security.

Employer/enterprise based or employer/enterprise financed vocational training schemes would be useful if developed and implemented as an integral part of the transition from war to peace. But

[103]See World Bank, May 1994.

private firms are often reluctant to train workers due to the possibility of loosing them once they are trained. Since many Eritrean workers will find it difficult to pay for such training, a role for the State may be necessary to subsidize the acquisition of business skills.

* **Incomplete Regulatory Framework**

Before independence, the regulatory environment in which the private sector operated was extensively administered by the Government. This constrained development of private sector activities as well as the potential for new entrepreneurs to enter and invest. Following independence, economic reforms carried out by the Government are beginning to improve the regulatory environment. Export marketing and import tariffs were liberalized. A new investment code was introduced as were duty free entitlements for some temporary imports. The national currency, the Birr was devalued, thereby increasing the competitiveness of exports. However, there are still some shortcomings in the regulatory system that need to be addressed to further create incentives for foreign enterprises to invest in Eritrea. These include removing export taxes to further improve the competitiveness of Eritrean exports, addressing the issue of double taxation when both domestic and imported inputs are used by exporters, introducing an export retention scheme when appropriate, and further rationalizing procedures for export licensing.

* **Access to Business Services and Advice**

Professional business services in the form of coaching/mentoring, conferences, and other advice from, say, larger firms doing business in more developed countries, are very limited in Eritrea. Such services are needed to stimulate Eritrean business persons to an improved and more competitive level. This is even more important in light of the interruptions to business development (war, political regimes) that have characterized Eritrean history. Increasing the access of Eritrean entrepreneurs to business services has the potential to enhance their business management skills to an extent that could improve business efficiency in food processing, marketing and distribution operations.

* Access to Information and Business Linkages

A large number of Eritrean entrepreneurs are out of date with regard to their awareness of current and competitive business practices. The establishment of a Business Information Center by the Chamber of Commerce could provide local businesses with updated business information and a range of business possibilities. It could also enhance their access to knowledge of entrepreneurial lessons and success stories in other countries.

There is potential for enterprise development in Eritrea, especially manufacturing enterprises. These are currently in a dilapidated state and mainly under public sector management. They consist mainly of light manufacturing producing a variety of goods including processed food, beverages, textiles, leather goods, chemical products, construction materials, glass, ceramics, and metal products. By improving access to business information, Eritrean entrepreneurs would be better informed about business possibilities (including grain marketing and other aspects of food security) both in and out of their country. This could create the basis for their involvement in agribusiness development and therefore food security.

1.3 Preliminary Prioritization of Constraint Factors (to be completed in primary research)

Food security enhancement in Eritrea currently faces a wide range of constraints. They can be categorized into constraints to achieving increased production agricultural output and food availability in the short and medium term, and long term constraints to development of the agribusiness private sector. The prioritization shown below is based mainly on the time frame within which alleviation of the constraint could make a real/positive impact on the sector, financial feasibility and ease of accomplishment.

1.3.1 Constraints to Increased Agricultural Production

In order of declining priority on the basis noted above, these constraints are:

Short term

(i) Unfavorable Government controlled/influenced pricing structure.

(ii) Limited small farmer access to credit.

(iii) Inadequate extension and training service for crop and livestock production.

(iv) Inadequate Government support to measures such as streamlining legislation, providing market information on crop and input prices (largely administered), undertaking studies on market potential for different crops to facilitate private sector activities in input supply, as well as the absence of an information system to collect, store and analyze data on the agricultural sector.

Medium to long term

(i) Absence of a properly defined and implemented strategy for managing agricultural expansion particularly in the lowlands.

(ii) Research and development limitations related to further enhancing productivity of land and labor in both the subsistence and commercial sectors.

This would involve the development, importation and/or use of: adapted drought resistant varieties, improved farming implements, more cost-effective farming practices, crop protection measures and fertilizers, soil and water conservation techniques and cost-effective irrigation methods, improved livestock breeding methods and forage production techniques. In fisheries, targeted development of the necessary infrastructure (e.g., storage and processing facilities, roads, ports), as well as an effective facilitating environment for fisheries export market development by the private sector.

(iii) Stimulus/support for development of the oilseeds subsector.

1.3.2 Constraints to Agribusiness Enterprise Development

In order of declining priority, based on the extent to which the constraint impairs successful agribusiness development:

(i) Limited access to capital/credit and foreign exchange for importation of machinery and other physical inputs.

(ii) Poor infrastructure (roads, communication and equipment).

(iii) Shortage of business management, marketing and financial skills especially planning, cost accounting and record keeping.

(iv) Incomplete regulatory framework.

(v) Low purchasing power/small market.

1.4 Priority Constraints Which the Private Sector Can Help Alleviate (preliminary--to be completed in primary research)

(i) Input supply and distribution.

(ii) Some contract training of community groups in certain aspects of agribusiness management.

(iii) Output marketing domestically and via cross border trade (regionally).

(iv) Stimulating capital formation and increased savings, via forming and expanding existing rotating credit associations and cooperatives.

(v) Breaking the agribusiness information dissemination barrier by trying to dialogue better and share experiences and lessons with in-country counterparts and Eritrean businessmen living in neighboring countries. This can be undertaken either directly between individuals and or through advocacy networks/associations whose formation is recommended below.

1.5 Constraints to Private Sector Participation in Food Security Enhancement (preliminary--to be completed in primary research)

In spite of the existing potential for private sector led economic growth and a meaningful role in the enhancement of food security, several constraints (as explained below) hamper participation of the private sector in food security enhancement.

*** Inappropriate Regulatory Environment**

Under the Ethiopian regime, enterprises operated under a highly centralized decision making and control framework. All exports, be they from private or public industry, were marketed by the parastatal, Ethiopian Import Export Corporation (Etimex), which also negotiated export prices with foreign buyers. The pre-independence investment code, although reformed significantly in 1991, was restrictive and failed to encourage participation of the private sector in most business activities. It offered limited scope for rationalizing investment application/approval procedures, especially to attract foreign investment. It lacked transparency and failed to establish a clear standard application procedure for investment licenses to avoid the impression of discriminating among applicants. Procedures for issuing investment licenses were burdensome and needed overhaul. Measures to protect business ownership and ensure participation of local entrepreneurs were unclear. On the

whole, the prevailing regulatory environment before 1991 did not encourage private sector business activities. This meant withdrawal of private businessmen from on-going ventures (including the grain trading business and related others) as well as a general lack of interest for entry by new entrepreneurs. Although the regulatory climate has been further revised since 1993, it needs to fully rationalized to render it more conducive to private sector participation.

* **Shortage of Capital for Private Sector Investment**

Long before independence, as part of Government's overall neglect of the private sector, agribusinesses were of very low priority in the provision of investment capital. Before 1991, the capital short Agricultural and Industrial Development Bank (AIDB) was the major lending agency to production agriculture. Most of its loans have been made to farmers and small-scale private and public industrial enterprises that would otherwise lack access to commercial credit. Since independence, the State-owned Commercial Bank of Eritrea's (CBE) lending to production agriculture amounted to less than 4% of all loans, most of which has been to the State-owned Aligheder farm. Other beneficiaries of CBE loans have been a few commercial farmers possessing high potential rain-fed irrigated concessions. Although CBE offers concessional interest rates for agricultural loans, it is wary of the risks (drought, low yields, limited marketing opportunities) and high administration costs of lending to small farmers. Most credit to production agriculture is thus provided mainly through NGO and donor supported programs, such as the Agricultural Rehabilitation Program (ARP) and the Recovery and Rehabilitation Project for Eritrea (RRPE).

The acute shortage of investment capital for private sector use has made it very difficult for entrepreneurs interested in the grain trade, agribusiness enterprises, and other related activities to enter into business even when such activities could indeed be viable business ventures and other necessary inputs are available. This has significantly curtailed the private sector's participation in food security enhancement.

* **Deliberate Anti-Private Sector Government Policies**

Under Ethiopia's rule, which began in 1953, the political climate deliberately discouraged private sector business activities. Prevailing political conditions did not attract private investment, thereby resulting in widespread mismanagement within and neglect for the sector. The atmosphere also caused massive emigration of private entrepreneurs, several with useful business management skills, to neighboring countries. In the absence of the appropriate political impetus for private sector led growth, capital flight and absence of external private investment, as well as defection of human talent

to other countries, the private sector failed to participate significantly in agribusinesses and related investments that could ensure a meaningful contribution toward food security enhancement. A number of policy utterings aimed at stimulating private sector involvement in the grain trade have been made by Government since 1993. Some of them have already been implemented. However, it is only with the passage of time that the Government's commitment in this regard will be fully realized.

*** Government's Slow pace with Privatization of Parastatals**

Before independence, decision making concerning public enterprises was highly centralized. Public enterprises were required to report to the Government through a number of Ministries. Most decisions (production plans, capital expenditure, profit margins, sale arrangements, etc.) were undertaken by the central Government in Ethiopia, usually the Ministry of Industry. Managers had limited ability to control critical enterprise level decisions such as setting of production targets, controlling product prices, determining profit margins, sourcing inputs, hiring and firing workers, training staff and making marketing and investment decisions. When the war of independence ended in 1991, public enterprises operating under Ethiopian rule were transferred to the ownership of the Government of Eritrea. As of September 1993, there were a total of 932 industrial enterprises in Eritrea, of which 42 or 5% were public enterprises. 14% of these were involved in the food sector and were much larger than private enterprises.

A number of steps have been taken since 1991/92 to improve the control framework for public enterprises, including movement away from the highly centralized control. Unfortunately, delays by the Government of Eritrea to fully relinquish its direct ownership and management of most parastatals has crowded out the development of a number of private sector initiatives including the grain trade, thereby curtailing private entrepreneurial participation in enhancing food security.

1.6 Examples of How the Private Sector Can Help Alleviate Priority Constraints

(preliminary--to be completed in primary research)

(i) Formation of sectoral advocacy groups and associations.

(ii) Liaising more with policy makers in problem identification and planning for sustainable resolution of such problems via sectoral associations.

(iii) Improving the quality, efficiency and effectiveness of operations in those areas in which the private sector is already involved, e.g., transportation and distribution.

(iv) Being more creative and innovative in identifying business opportunities in view of existing comparative advantage and other relevant economic considerations. In certain cases, taking expedient investment risks.

1.7 Identify Specific Companies Interested in Participation & Determine Form of Potential Involvement

---To be done in-country.

1.8 Conclusions (preliminary and based on secondary research only)

In the short term, there is scope to increase food production and availability in Eritrea, particularly in the western lowlands such as Gash-Setit. However, without capable and sustainable private sector involvement in production (peasant and commercial), and such factors as input supply and output marketing, significant doubt exists that in the foreseeable future, adequate food/grain crops can be cultivated to meet total domestic requirements, and as such, eliminate the need for commercial or aid imports.

In the long run, it is likely that food security objectives can only be attained by the performance of other sectors in the economy, such as manufacturing and service industries. These sectors may eventually be able to absorb more of the work force and generate higher incomes, as well as the exports needed to pay for imports to fill the food production gap. An overwhelming reliance therefore on the private sector to assume a paramount role in enhancing domestic food security objectives at the present time could be misleading given their prevailing deficiencies and the drought-prone agricultural sector.

Despite policy utterings to the contrary, there is continued and extensive domination of the production agriculture and agribusiness sectors by Government, often to the extent of crowding out private sector growth. The Government must pay attention to ensuring a functional institutional framework for the development of production agriculture, livestock and fisheries. To promote development of the private sector, further assistance is required in addition to policy and regulatory changes, e.g., developing private sector human, institutional and infrastructural capacity in food security.

Forms of self-assistance by the private sector could include strengthening business advocacy via the formation of fora/schemes such as sectoral business associations, clubs, agricultural cooperatives, etc. Such pressure groups could liaise with the Ministry of Agriculture and the Chamber of Commerce, and should be able to better lobby with Government for positive change in the private sector. Advocacy groups will enable entrepreneurs to dialogue more closely with policy makers, make their problems known, and jointly assist in planning strategies for their sustainable resolution.

For at least the present moment, it would be rational for the Government to focus on the provision of services in which it has a comparative advantage, e.g., research and extension. Simultaneously, Government should gradually phase itself out of its ongoing and broad-based activities in input supply and post-harvest agriculture while providing the enabling policy environment to ensure its sustainable replacement by the private sector.

Appendix III - Ethiopia

1.0 Ethiopia

1.1 Introduction

The important role of Agriculture in Ethiopia's economy is legendary. Although its current share of GDP is slightly below 45%, a sharp drop from 58% in the 1960's, it is clearly far ahead of industry (18%) and services (37%).

The decline in GDP share noted above is not due to any significant structural transformation, but instead due to stagnation in agriculture, which has in-turn reduced its relative contribution to national income.[104] Agriculture's contribution to employment and foreign exchange earnings are substantial. An estimated 85% of the labor force is engaged in agriculture and coffee alone accounts for 60% of total export earnings. The latter highlights the traditionally heavy reliance of the economy, until recently, on one export.

Food processing, textiles, footwear, and clothing account for most of the output and employment of Ethiopian factories. But food processing is very important in small-scale production, accounting for just under 66% of the total output in this sub-sector.

Ethiopian agriculture is essentially peasant agriculture, with smallholders accounting for more than 90% of cultivated land and agricultural production, however, state farms and co-operatives do exist.

Cereals are by far the most dominant crops, accounting for 85-95% of total crop production. The most important cereals in terms of volume are maize, sorghum, teff, barley and wheat, with the first three accounting for about 66% of total cereal output.

With a total land area of 122.6 million hectares, of which 9.3 million is cropped, 3.1 million lying fallow and 65.3 million being pasture land, less than 10% of Ethiopia's land is utilized at any one time

[104]Mulat, T. Agricultural Taxation in Ethiopia. Food and Agriculture Organization of the United Nations (FAO), Rome, 1992.

for crop production.[105] This gives rise to the widespread but unsubstantiated belief that there is still massive, good, and unutilized land to be brought under cultivation.

Although some 60% of the total population is in the subsistence agriculture sector, (where the surplus of peasant agriculture--that which is over and above the peasants' food needs-- accounts for about 16% of GDP), many Ethiopians are chronically food-insecure. Total agricultural output has grown at a rate of about 1%, which is less than that of population growth (approximately 3%), thereby causing a decline in per capita agricultural output. Per capita food consumption among subsistence farmers has declined over the years, just as it has among those who are market-dependent.[106] Cereal imports increased 11 fold from 50,000 tons in 1960 to 610,000 tons in 1987. During the 1980's, per capita food production declined by 2.1% annually, but the imbalance of demand and supply had so become severe by the end of the decade that in 1991, after a record 1990 harvest of 7.3 million metric tons MT, Ethiopia had a food deficit of 985,000MT, which by 1992 worsened to 1.03 million MT.[107]

Ethiopia's food insecurity problem arises largely from the failure of farm output and agricultural production to keep pace with population growth. Because of extensive Government intervention in and control of the rural economy (dominated by agriculture), the energies of individual peasants, families, groups of families and communities engaged in production agriculture have often been stifled, resulting in lack of investment, stagnation in productivity, and deterioration in the resource base.[108] Other factors responsible for food insecurity are widespread and chronic poverty, self-defeating agricultural policies, underdeveloped rural infrastructure, environmental degradation and lack of access to improved inputs. Over the years, the country's ability to make its people food secure through trade has not improved to any significant extent, partly because of Ethiopia's over-dependency, until recently, on one export, coffee, whose international market price Ethiopia does not control.

[105]See Mulat, T., Rome, 1992.

[106]InterGovernmental Authority on Drought and Development (IGADD). Food Strategy Study: Initiatives to Benefit Food Insecure Small Farm Households in the IGADD Region, Annex 3.

[107]U. S. Agency for International Development/Ethiopia. Ethiopia: Back to the Future. Addis Ababa, June 1993.

[108]See IGADD, Annex 3.

As is the case of most other countries of the Horn, the linkages between agricultural performance and overall macroeconomic strength and vitality are of overriding importance in Ethiopia.

Similarly, the achievement of lasting food security in Ethiopia heavily depends on the state of the agricultural sector and well functioning agricultural products markets, both of which, have traditionally been under Government command and control. Hence, there have been calls for withdrawal of the state from its pre-eminent intervention in the agricultural sector. The GHAI approach to achieving food security encompasses food availability, access and utilization at regional, national and household levels.[109] Long-term food security also depends on the sustained, broad-based growth of the economy, which incorporates raising and equitably distributed income. Broad-based economic growth calls for an appropriate policy environment, as well as support for sectors other than production agriculture, including export products, the development of micro-enterprises, and food processing industries.

Ethiopia has the potential to increase agricultural production, and the comparative advantage to do so, especially in non-drought years. Therefore, attention needs to be focused on improving policies and making the relevant food production and preservation/processing technologies available.

The link between agribusiness development and food security is intuitive because agricultural production development has more direct relevance to food security and agribusiness development has more relevance to stimulating and supporting production agriculture than does the development of other business sectors. The raw materials agribusinesses acquire, process and market locally or for export, are the same items that are produced by poor, peasant, rural-based farmers in Ethiopia. Therefore, if better delivery systems, inputs, infrastructure, technical assistance, and or regulatory/policy environments are made available to farmers, it is very likely that farmers will produce more and better quality agricultural products. Consequently, agribusinesses are more likely to receive a better product faster and more cost-effectively. This will greatly assist in ensuring that less expensive food items are available for sale. With less expensive food commodities on sale, it is likely that more people can afford to purchase food and therefore reduce their susceptibility to food insecurity.

[109] Breaking the Cycle of Despair: President Clinton's Initiative on the Horn of Africa. A Concept Paper for Discussion, Washington, D.C., November, 1994.

The major strategy for agricultural development and achievement of food security in Ethiopia until 1990/91 was based on socialization.[110] After 17 years of a centralized economy and civil conflict, Ethiopia is now becoming an increasingly market-oriented and democratic society.[111] Under the stabilization and structural adjustment programs of 1992 and 1993, the Transitional Government of Ethiopia (TGE) which came to power in May 1991, instituted a variety of policy and administrative reforms designed to stabilize the economy, eliminate cost and price distortions, ensure efficient resource allocation, and reduce the size of the public sector. These reforms were all steps in the right direction. But unfortunately, the performance of the agricultural sector, the cornerstone of the country's long-term macroeconomic well-being, has generally been disappointing, and therefore, domestic food security has not improved. Due to the overriding importance of agriculture in the economy, which, like the economy, has been largely centralized, agriculture's stagnation has entailed overall economic stagnation.

1.2 Overview of the Private Sector in Ethiopia

There is a fairly large class of wealthy Ethiopian entrepreneurs living in and out of Ethiopia, but the sector has never fully developed for many reasons, including political ones. Privately owned and operated firms constitute the dominant number of enterprises. The private sector was stifled under the command economy of the past few decades, and the current environment is still not conducive to private sector growth and development.

In the formal sector, food, beverages and textiles accounted for 60% of manufacturing sector output in 1987/88 compared to 66% in 1993. In 1990, over 50% of urban informal sector establishments were concentrated in food and beverages and another

[110]Socialization here refers to expanding the relative roles of the state and cooperative sectors. The strategy included massive programs of resettlement and villagization. The former involved moving large numbers of people from drought-hit areas to others considered more suitable for agricultural development. The latter involved creating new villages by moving people out of their traditional areas of settlement, with the objective of facilitating the provision of services such as electricity, water, schools, health services, etc., to the rural population.

[111]World Bank. Ethiopia: Business Development Action Plan. Unpublished Report, Washington, D.C.

20% in the textile sector. Over 63% of formal sector establishments are located in Addis Ababa compared to 33% for the informal sector.[112]

Firms in Ethiopia's private sector (formal and informal) are small, but account for most economic activity. Despite the wide-ranging participation of the private sector in the economy, most firms are small, family-based enterprises, and most often operate in the informal sector. The number of informal sector establishments exceeds, by over 100 times, that of medium and large scale formal enterprises (MLSFE's), but the per firm average value added of informal firms is less than 10% of the average value added for private formal MLSFE's. The informal sector accounts for an estimated 90% of private sector production, 89% of manufacturing activity, but contributes only 15% to GDP when non-monetary (subsistence) sectors are excluded. When non-monetary sectors are included, total private sector activity accounts for approximately 90% of GDP.[113]

In agribusiness, the private sector is active in transport, trading and other services, small-scale manufacturing and processing. Unfortunately, private commercial farming is hindered by very minimal private ownership of land. Private firms are largely dependent on their own funds, informal lending groups ("Ikubs"), and individual money-lenders to raise needed capital.

Data on women entrepreneurs is limited. There is a need to explore data sources and consolidate information on the structure and constraints of women-owned firms. Such data will be critical in understanding the role of women in business, and evaluating the impact on women of specific food security enhancing interventions in the private sector.

1.3 Identification and Analysis of Important Constraints to Food Security

1.3.1 General Constraints Facing Production Agriculture

[112] San Martin, T. and Christopher Hartland-Peel. Ethiopia: Recommendations for Action in the Private Sector. USAID/Ethiopia, January, 1992.

[113] See San Martin et al.

The dismal performance of Ethiopia's agricultural production sector over the past several years and its negative impact on food security are the result of a variety of complex and often inter-related factors, the most important of which are identified and discussed below.

*** Insecurity of Land Tenure**

Current land tenure policies greatly undermine the performance of the agricultural sector and food production in Ethiopia where an estimated 85% of the total labor force is engaged in agriculture. In March 1975, land reform nationalized all rural lands and promoted equitable land distribution in the few years thereafter. During 1992-94, land tenure was debated as a constitutional issue and culminated in the ratification of the national Constitution in December, 1994. The new constitution denies individual farmers' right to sell, lease and transfer their land to others, raising serious questions about the potential transformation of agriculture to a market economy as well as whether state ownership of land promotes economic growth in general and food self-sufficiency in particular.[114]

*** Environmental Degradation**

Environmental concerns, particularly soil degradation and deforestation, are serious constraints to increasing agricultural production. Intensive cultivation and overgrazing are causal factors for the degradation of the natural soil resource base. Due to the shortage of good grazing land, particularly in the highlands, grazing areas can supply a maximum of only 50% of animal feed requirements. Hence, crop residues are reserved for feeding animals and not recycled. Extensive deforestation in the highlands has forced farmers to use animal manure as the primary fuel, resulting in the return of little organic matter to the soil, leading to a decline of soil organic level over time, and consequent soil fertility and environmental problems. Low soil fertility leads to poor ground cover while poor soil physical properties lead to poor water infiltration; the combination of which translate to soil erosion and decline in per hectare yields. This trend undermines agricultural production and output, limits food supply and causes food insecurity.

*** Rapid Population Growth**

[114]Lirenso, A. Grain Market Reform and Food Security in Ethiopia. Food Research Institute, Stanford University, California, June 15, 1995.

Ethiopia's ability to transform its agricultural sector and achieve on-going food security is critically dependent on how successfully it resolves its population growth rate problem. Rapid population growth leads to land fragmentation and a growing labor pool in the rural areas (as some families do not survive as independent producers)[115] and thus threatens to undermine all development activities. Annual population growth is approximately 3%, total fertility rate approaches 7 children per woman and use of modern contraceptives is negligible, all vivid reminders that if present trends continue, there could be more than 145 million Ethiopians by the year 2025.[116] Population growth directly affects per capita income and increases the need for food, land, jobs, health care and education. Clearly therefore, with the existing rate of population growth, agricultural growth should not only be further stimulated, but also, efforts should be made to ensure that its growth at least surpasses that of population, if significant gains in food security are to be expected. Since per capita output of food has been declining as population growth outstripped food production, agricultural output growth rates in Ethiopia should be at least be 5.7% annually just to maintain status quo consumption.[117]

* Low Level of Technology

The level of technology utilized in Ethiopian agriculture is low. Infrastructure for agricultural research and dissemination is limited. Gains achieved via technological advances have been confined to a few regions. Fertilizer use is extremely low. Less than 10% of farmers have access to fertilizers.[118] State farms are major users of fertilizer and together with cooperatives, enjoy priority over individual farmers in fertilizer access. Reasons for low fertilizer use by smallholder farmers are unavailability and/or high cost of fertilizer, as well as absence of credit facilities to purchase fertilizer.[119] With the exception of Ethiopian Amalgamated Limited (EAL), limited or no experience exists in the private sector in fertilizer procurement and marketing, a condition worsened by the absence in the Ministry of Agriculture of a Fertilizer Planning and Monitoring Unit.

---

[115]See IGADD, Annex 3.

[116]See Ethiopia: Back to the Future.

[117]USAID. Food Aid and Food Security Policy Paper. Bureau for Program and Policy Coordination, Washington, D.C. February, 1995.

[118]See Mulat, T., Rome, 1992.

[119]U.S. Agency for International Development. Ethiopia Fertilizer and Transport Sector Assessment. International Fertilizer Development Center, Alabama, U.S.A, December, 1993.

Although initial adoption of improved varieties of wheat and maize, and to a lesser extent of barley and teff, spread quite rapidly, the momentum has since slowed down. The Institute of Agricultural Research has developed and released new varieties that are believed to be not significantly better than local ones. The Ethiopian Seed Corporation, the parastatal responsible for producing and distributing improved seeds, has made seed sales predominantly (an estimated 67%) to state farms. In view of all of these factors, not more than 2% of farmers use improved seeds.[120]

Contrary to the Government policy of encouraging mechanization and especially tractorization, adoption has been slow and the factory established to aid the process has faced difficulty in selling its products. The net effect of the above deficiencies is stagnation in agricultural output, food insecurity and macroeconomic weakness.

*** Unfavorable Government Policies to Stimulate Agricultural Development**

Prior to January 1988, Government policy was such that in some regions of the country, merchants were required to sell all of their purchases to the Government, and in others, private operations were prohibited. Prior to March 1990, when a number of significant policy reforms were announced by Government, farmers were required to sell a state-determined, fixed quantity of grain to the Government marketing agency, the Agricultural Marketing Authority; merchants were required to sell 50% of their purchases (25% in the case of exportables) to the same agency. Yet, state-determined prices have been consistently lower than import-parity prices. These policies have hampered production and impacted adversely on agricultural output, productivity and food security.

Recently, grain marketing has undergone a number of structural changes--from extreme regulation to extensive deregulation, thereby reducing but not eliminating the impact of this constraint on production agriculture. In 1992, the organizational structure of the Agricultural Marketing Corporation (AMC), the monopolistic grain marketing parastatal, was streamlined and the Corporation was renamed to the Ethiopian Grain Trading Enterprise (EGTE). The objectives of the EGTE were revised and its role in grain markets was reduced to stabilization of producer and consumer prices and maintenance of buffer stocks, and the wheat price subsidy annually paid to EGTE by Government was cancelled, thereby marking an end to the bread price subsidy to urban consumers.[121]

---

[120]See Mulat, T., Rome, 1992.

[121]See Lirenso, A., June 1995.

* **Drought/Weather**

Climate and topography show remarkable diversity among and within the different regions of the country. On the highlands, marked differences in elevation define patterns of temperature, rainfall, and growing seasons. Rainfall ranges from below 500mm to over 2000mm per annum in the lowlands.[122] The problem with climate is not so much that it may have changed significantly during the 20th century, but instead, human activities have changed the environmental and societal impacts of drought. The areas most adversely affected by drought (several major ones occurred in the 1970's and 1980's), are those with highly variable inter-annual rainfall and are therefore considered marginal for sustained agricultural production.

Weather therefore continues to be the single most important natural factor in determining agricultural performance and national food production. Due to weather variations and drought, year-to-year variation around the average production during the 1980's was approximately 13%, with serious consequences for food security and overall economic performance.[123]

* **Persistent Civil Strife**

Ethiopia has a long history of persistent wars, the most recent of which is the 30-year long civil war with Eritrea. It began in 1953 when Eritrea was turned over to a new Eritrean-Ethiopian federation, in accordance with a UN General Assembly resolution passed in 1950.[124] Ethiopia's devastating and persistent civil wars culminated in the Mengistu regime's military defeat in May 1991 and the ascent to power of the Ethiopian People's Revolutionary Democratic Front (EPRDF). Thus ended 17 years of the brutal Marxist dictatorship, and the beginning of the new phase in Ethiopia's history.

Ethiopia's persistent wars fuelled political instability, stood in the way of well defined and lasting macroeconomic policy formulation and implementation, shattered road transportation and communication infrastructure, discouraged economy-wide private investment and trade, introduced

[122]McCann, J., "The Dry Regions of Ethiopia" in Drought Follows the Plough, Glantz, Michael H. (Ed.), Cambridge University Press, 1994.

[123]See Ethiopia: Back to the Future.

[124]International Monetary Fund. Eritrea - Recent Economic Developments. Washington, D.C., November, 28, 1994.

constraints to the development and growth of production agriculture and industrial activity, caused lawlessness, and stagnated just about every facet of economic activity.

1.3.2 Constraints to Private Sector Development

The majority of firms in the Ethiopian private sector, ranging from micro-enterprises through small and medium sized firms, are facing a variety of problems that may be traced back to the country's history and cultural traditions. But limited, if any, attempts have been made to consolidate information from various sources or systematically analyze private sector constraints or inter-and intra-sectoral differences in constraints. The following is a an inventory and discussion of the key constraints facing private sector growth and performance and how they impact on food security, based on available information.

*** Lack of Credit**

The shortage of formal credit and related financial services for either start-up, working capital or business expansion has negatively affected the private sector. Most private firms depend either on self-financing or informal lending groups to obtain capital. The cost of credit to private entrepreneurs is 2-4% higher than for State Owned Enterprises (SOE's). The aggregate effect of this major credit shortage is limited investment by the private sector, limited investment in agribusiness, limited agricultural and food production, and ultimately food insecurity.

*** Shortage of Raw Material Inputs**

For private agribusiness enterprises to operate successfully, a wide variety of raw materials produced by the agricultural sector is needed, as well non-agricultural inputs, often imported, such as equipment and spares. In the case of agricultural output and therefore agribusiness raw materials, availability and cost are directly related to the performance of the production agriculture sector, which over the past several years has been disappointing. The availability and cost of imported agribusiness inputs has been indirectly determined both by the strength of the agricultural sector (which contributes significantly to GDP, exports and ultimately foreign exchange), as well as by Government monetary policy, which has greatly intervened in the foreign exchange market. Foreign exchange has generally been scarce.

Short supply of equipment, spares, and other imported raw material inputs for agriculture, agro-processing, industry and manufacturing has deprived these sectors of inputs and resulted in less than

optimum production and output. Poor performance of production agriculture (caused partly by its limited use of physical and other inputs), and the scarcity of foreign exchange have in combination caused widespread shortages of inputs for private agribusinesses. Any further expansion of the private sector will increase the demand for inputs, many of them imports.

*** Government Fiscal and Regulatory Policies**

Over the past 15-20 years, the Government significantly intervened in virtually every sector of economic activity in Ethiopia and as such minimized private sector participation. It fixed interest rates, controlled all financial institutions and foreign exchange allocations, deprived individuals of land tenure rights, operated state price controls and pan-territorial pricing, mandated state acquisition of crop production quotas at prices lower than export-parity, put SOE's under political control and management, etc.

However, since 1991, Government has made progress in reforming its macroeconomic policy and improving fiscal policy. The formulation of a new investment code, new tax policies, elimination of several price controls, etc., are notable examples of positive change. However, the process of transition has been accompanied by considerable uncertainty. The private business community therefore is still in the dark about the powers of the individual administrative regions (14 in all) to execute independent economic policies, the degree to which taxation, licensing, customs, and other regulatory "red tape" will be reduced, and their relationships with SOE's.

*** A Shortage of Information and Business Linkages**

Due mostly to years of disregard for the private sector, but also, the protracted tilt by Government toward socialist economic principles, a large number of Ethiopian businessmen and industries are not aware of current and competitive business practices. Business information dissemination is limited. Yet, such information could give local industry updated ideas and news about the various business possibilities that may exist, as well as procedures for business start-ups or expansions. It could also inform them of entrepreneurial lessons and success stories in other countries.

Domestic business linkages (e.g., associations) that bind the enterprise system together are virtually non-existent. Mutually beneficial relationships between buyers and suppliers, such linkages and collaborative relationships can promote private sector development through enhancing the operational efficiency of the buyer as well as the growth of the supplier. By linking smaller firms to larger firms,

mutually lucrative business opportunities could be identified, business growth and development could also be fostered.

*** Poor Infrastructure and Support Services**

In most parts of Ethiopia, key infrastructural services to meet the needs of the existing private sector is both limited and unreliable. In road transport, the prevalence of large one-owner trucking fleets and the small size of the sector is a constraint to developing competitive markets through numerous competing small firms. The number of trucks per country is also among the lowest in Africa.[125] With approximately 4,000 km of bitumen roads, 9,000 km of gravel roads, and 6,000 km of earth roads, mostly in poor condition, Ethiopia's road system represents one of the least extensive (based on kilometers per capita) in Africa. Extremely poor road conditions add considerable costs to transport operations and restrict the capacity utilization of existing truck fleets.

The overall effects of core infrastructural deficiencies on private sector development are very serious, especially in the areas of electricity supply, telecommunications, and the road and transportation system. Directly or indirectly, they limit the capacity to transport private sector inputs and outputs (agricultural and non-agricultural), lead to higher costs of transportation, hamper supply of agricultural and food commodities to markets, and as such, contribute to food insecurity.

*** Minimal International Business Linkages**

Ethiopia's domestic enterprises need to emerge from their current state of isolation from international productive sectors and establish links related to production, services and markets, all of which are central to successful business operations, given today's fast-paced and high tech business environment. Collaborating with counterparts overseas could be a viable means of achieving this objective.

*** Shortage of Business Training**

The private sector is largely deficient in the business skills (e.g. accounting, management, etc.), required to function effectively. For Ethiopian businessmen to be fully assimilated into the world of international business, they need to develop their human resource capacity. Need also exists for them to bridge the significant gap that currently exists in the relevant industrial skills, technology, etc.

[125]See Ethiopia Fertilizer and Transport Sector Assessment.

*** Lack of Effective Business Advocacy Mechanisms**

Private sector business advocates in Ethiopia include the Ethiopia Chamber of Commerce, 11 City Chambers and approximately 60 sectoral associations. But business advocacy is not as effective as it should be, even in light of the embryonic stage of business development. This deficiency in business networks can be blamed on the absence of a consultation mechanism for policy making on the part of Government, scarce or non-existent coordination among the main players within the advocacy system, the unrepresentative nature of its formation, the existence of a resource shortfall due to delinquency in payment of Association fees and dues, and fragmentation of membership. Such defects have raised questions about the credibility and image of the advocacy institutions, thereby making it very difficult for them to effectively represent private business.

*** Involvement of Parastatals in Input/Output Marketing**

State Owned Enterprises (SOE's) historically monopolized input supply and grain marketing in Ethiopia. They not only incurred huge losses, but borrowed heavily from Banks and depended greatly on Government subsidies for their survival. The Agricultural Inputs Supply Corporation (AISCO) was legally established as a parastatal in October 1984 under the Ministry of Agriculture to procure, import, distribute, and market agricultural inputs to the peasant and state farm sectors. The EGTE, formerly known as the AMC, was the Government's dominant agent for compulsory grain purchase.

However, since liberalization of grain marketing in 1989, its role has shrunk. In 1992, various efficiency-oriented measures were introduced by the Government to fully liberalize the grain market. They culminated in the removal of the Government subsidy on the price of wheat, revision of the objectives of the EGTE and the reduction of its role in grain markets to one of stabilizing producer and consumer prices and maintaining buffer stocks.

Government activities to support loss-making and largely inefficient parastatals discourage private sector development in the transport and marketing of agricultural production inputs/outputs as well as industrial products. At the moment, it is unclear as to what extent parastatal involvement in grain marketing is still a current constraint to private sector development.

1.4 Preliminary Prioritization of Constraint Factors (to be completed in primary research)

As noted earlier, private sector agriculture sector enterprises currently face a wide range of constraints. They are categorized below into constraints to achieving increased agricultural production and food availability and constraints to Agribusiness development. Key constraints are outlined below in order of declining priority. The prioritization is based mainly on the magnitude of the constraint and its impact on limiting either agribusiness enterprise development or production agriculture.

1.4.1 Constraints to Increased Agricultural Production

(i) Insecurity of land tenure

(ii) Low level of technology

(iii) Unfavorable Government policies

(iv) Rapid population growth

(v) Environmental (soil) degradation and droughts

1.4.2 Constraints to Agribusiness Enterprise Development

(i) Lack of credit for business start-up, working capital and expansion as well as for obtaining foreign exchange for importation of equipment

(ii) Shortage of raw materials (agricultural and non-agricultural)

(iii) Inadequate infrastructure and support services

(iv) Fiscal and regulatory policies of Government

(v) Information and business linkages

1.5 Priority Constraints Which the Private Sector Can Help Alleviate (preliminary--to be completed in primary research)

(i) Limited input supply and distribution to both production agriculture and agribusinesses

(ii) Bottlenecks to marketing of output from production agriculture and agribusinesses locally and via cross border sourcing trade

(iii) Limitations to start-up/working capital formation

(iv) Barriers to agribusiness information dissemination

(v) Limited skills in some aspects of agribusiness management

1.6 Constraints to Private Sector Participation in Food Security Enhancement (preliminary--to be completed in primary research)

Ethiopia's food sector suffers from various constraints that inhibit and/or discourage the participation of private entrepreneurs in grain marketing, and subsequently food security enhancement. These constraints are described below.

*** Annual Registration and Licensing Requirements of the Grain Trade**

Until March 1990, registration of all businessmen, including private grain traders, was carried out by the branch offices of the Ministry of Trade in each administrative region. Issuing of trade licenses for traders in all regions was highly centralized and carried out exclusively by the Ministry's head office in Addis Ababa. Grain traders were required to be recommended by the regional Grain Purchase Task Force (GPTF) which administered grain quotas. Even after favorable recommendations from the task force, the Ministry had to verify whether the trader had paid taxes to the Inland Revenue Administration (IRA) and Annual Fees to the Ethiopian Chamber of Commerce (ECOC). After verifying all of this, it took approximately 3-4 months for traders to obtain licenses through the very dense administrative hierarchy of the Ministry. Consequently, private traders wasted time and funds on trips to Addis Ababa to secure licenses. The fees charged by the Chamber barred many businessmen from making a free and formal entry into grain trade. In combination, these were major barriers to entry into grain trading, as well as obstacles for the smooth functioning and continuation of the private grain trade by those who were already in the business.

After March 1990, some improvements were made in the registration and licensing of traders. Compared to previous requirements, the new requirements (including the decentralization of license-issuing), have brought a number of changes in licensing policy and slightly eased entry barriers to the grain trade.

*** Discriminatory Nature of the Government's Tax Policy**

During the 1980's, the Government's tax policy was especially burdensome on the private sector compared with the state and cooperative sectors. Private traders were required to pay up to ten different types of taxes (including municipality tax, profit tax, sales tax, etc.) while the state and co-operative enterprises paid less, and were even exempt from some taxes and fees imposed on traders. The assessment of profit tax assessed on each businessman, including grain traders, has been biased and highly subjective--based on rough estimates of annual turnover by inspectors of the Internal Revenue Administration (IRA). Since consequences for non-payment of profit taxes were severe and ranged from penalties to confiscation of property, this method of tax assessment encouraged private traders to bribe inspectors. Even after deregulation of grain markets and prices in March 1990, most taxes were imposed to more or less the same extent as before.

The Government's subjective and unsystematic tax policy of the 1980's reduced the incentive for the private sector to invest in the grain trade, prompted them to undertake unlicensed grain trading activities, and/or even switch to other non-food business activities.

*** Credit Policy Bias**

Although the provision of credit or seed money to enable new entrants to get started is argued as being one of the most effective means of enhancing the participation of private traders in food security and minimizing barriers to their entry into the grain trade, the credit policy pursued in the 1980's was unfavorable to the private sector in terms of both interest rates and credit disbursements. Until 1992, the Bank interest rate for private traders was higher than that for the state and cooperative enterprises. Between 1980 and 1986, over 80% of the total credit disbursement by the Commercial Bank of Ethiopia (CBE) for domestic grain trade went to the public sector, particularly, the AMC, while the remainder went to the private sector. Even after October 1992, the credit policy bias against private traders did not change very much.

The lack of funds for investment in stores, haulage vehicles, etc., to be used in the grain trade has created a significant disincentive for private sector participation in the grain trade and thereby, private sector-led food security enhancement.

*** Government Restrictions on Private Investments Related to the Grain Trade**

In the 1980's Ethiopia's socialist economic policies prohibited and discouraged private traders from investing their capital in marketing facilities. For instance, foreign exchange was not available to private traders, although it was needed to import trucks, spares and other equipment needed in the grain trade. Although some of these restrictions were relaxed beginning in March 1990, appropriate measures are still to be implemented to support the development of private trade. These policies frustrate entrepreneurs already involved in the grain trade and discouraged others planning to participate.

*** Limited Political Support for Private Sector Participation in the Grain Trade**

As noted earlier, the private sector in Ethiopia was deliberately stifled under the command economy of the past few decades. Instead, the main grain trading parastatal, the AMC, was supported to dominate grain marketing to the extent of crowding out the private sector. And although several reforms were made beginning in March 1990, the current environment is still not conducive to private sector growth and development. With Government failing to offer the necessary enabling policy environment for the private sector to sprout, develop an interest and invest in the grain trade, entrepreneurs already engaged in grain trading activities are likely to gradually defect to other more attractive business ventures, while those planning to enter might not, failing (rationally) to see any good economic reason to do so.

1.7 Examples of How the Private Sector Can Help Alleviate Priority Constraints

(i) Improving the quality of services in those areas in which the private sector is already involved, e.g. transportation and distribution

(ii) Forming and expanding the memberships of existing rotating credit associations and cooperatives to service the working capital/start-up equity needs of agribusiness MSEs

(iii) Strengthening the existing sectoral advocacy groups and associations by being more proactive, and also liaising more with policy makers in problem identification and planning for sustainable resolution of such problems

(iv) Better dialogue and experience sharing with in-country counterparts and Ethiopian businessmen living in neighboring countries to disseminate information. This can be undertaken directly between individuals and through existing advocacy networks, most of which are in current need of consolidation

In combination, these activities can help private businesses be more creative and innovative in identifying business opportunities

(v) Use of the limited existing local capacity and experience in extension agronomy and management of small scale businesses to conduct training of groups of private individuals especially those living in rural areas

1.8 Identify Specific Companies Interested in Participation & Determine Form of Potential Involvement

---To be done in-country.

1.9 Conclusions (preliminary and based on secondary research only)

Ethiopia faces a daunting challenge as related to agricultural transformation, domestic food security, and macroeconomic well-being. Given the overriding need for increased agricultural production, particularly of food grains, the key issue is for the policy environment to fully unleash the economic forces of an open, competitive market system oriented toward improved customer and consumer satisfaction. The problems facing Ethiopian agriculture are complicated by the remarkable diversity in topography and climate among and within the regions of the country. The striking variation among surplus and deficit producing areas suggests a need for agricultural development programs designed to fit the realities of many different agricultural economies, not just one blanket program.

Domestic food security encompasses concerns of food supply, access and utilization in. In Ethiopia, it appears that supply is the most crucial, in light of the fact that food grain production represents the single largest parameter in the food security equation. In the near term, significant productivity gains

of Ethiopia's main food crops (grains) can be realized via increased and better use of fertilizers and improved seed varieties as well as reform of the marketing structures. Further, elimination of Government control of grain prices has the potential of offering a significant financial incentive for farmers to increase production and utilize improved technology.

Over the past 17 years, the private sector has been overshadowed by a centralized economy that was brought about by policies of political regimes that significantly inhibited entrepreneurial development. During the same period, war and other civil conflicts also contributed to curtailing the sector's development. Under these circumstances, food security and overall macroeconomic performance drifted unmistakenly downward. If developed, the private sector could meaningfully participate in enhancing agricultural transformation and food security, especially if the market is allowed to operate without distortion from Government.

Over the medium to long-term, two concerns exist for sustained agricultural, food security and overall economic growth. First, is the need to reduce the direct participation of the public sector in production agriculture, agribusiness and other related commercial activities, thereby providing opportunities for private sector involvement, investment, employment and growth. The second is to arrive at a balance between the central and regional Governments, so as to encourage local economic and social initiatives without jeopardizing overall macroeconomic stability.

Strategies for developing the private sector should be based on the fundamental economic principles of competitiveness and comparative advantage. The Government, in collaboration with various donors (AID, World Bank, ILO, FAO, UNDP, etc), interested in private enterprise development, should now create an environment and comprehensive strategies conducive to private sector development and growth. This should be equivalent to developing the capacity of Ethiopian enterprises to produce goods and services that meet the test of international markets while maintaining their share of the domestic market.

Apart from directly assisting in alleviating food insecurity problems, private sector development and expansion will also be crucial in absorbing the large numbers of demobilized soldiers that are a direct aftermath of the war with Eritrea.

With regard to the thorny policy issue of whether or not the state should totally withdraw from food storage, marketing and distribution and leave these tasks to the private sector, as indicated from the earlier analysis of constraints facing the private sector and production agriculture, the private sector cannot at the moment manage a large-scale food crises without the participation and/or support of the

State. Food storage, marketing and distribution should therefore not be left entirely to them at the moment, but should instead be considered as part of a long-term national food strategy in Ethiopia. A certain extent of state participation in food storage and distribution should however be continued in the short run during the transition, while Government plays a positive role in providing the enabling environment for private sector development so as to ensure their effective and complete implementation of these functions as the private sector replaces the state/quasi-Government sector (parastatals) in the long run.

Bibliography

Kenya

World Bank. Unpublished Material, various years, Washington, D.C.

Shapouri, S., et al. Food Strategies and Market Liberalization in Africa: Case Studies of Kenya, Tanzania and Zimbabwe. U.S. Department of Agriculture, Economic Research Service, Washington, D.C., September, 1992.

USAID. Food Aid and Food Policy Paper. Bureau for Program and Policy Coordination, Washington, D.C., February 27, 1995.

Campbell, D., "The Dry Regions of Kenya" in Drought Follows the Plough, Glantz, Michael H (Ed.), Cambridge University Press, 1994.

Food and Agriculture of the United Nations (FAO). Agrostat Electronic Database. Ongoing.

Mulinge, M. and T. S. Jayne. Urban Maize Meal Consumption Patterns: Strategies for Improving Food Access for Vulnerable Urban Households in Kenya. U.S. Agency for International Development, Policy, Analysis, Research, and Technical Support Project, Technical Paper No. 8, May, 1995.

Food and Agriculture Organization of the United Nations (FAO). Sessional Paper No. 4 of 1981 on National Food Policy. Nairobi, 1981.

Parker, J.C. and Tanya R. Torres (Eds.) Micro-and Small-Scale Enterprises in Kenya: Results of the 1993 National Baseline Survey. GEMINI technical Report No. 75, Bethesda, MD., March 1994.

Department of Economics, University of Goteborg, Sweden; and Department of Economics, University of Nairobi, Kenya. Limitations and Rewards in Kenya's Manufacturing Sector: A Study of Enterprise Development. April 1994.

U.S. Agency for International Development. Kenya Country Program Strategic Plan, FY 1990-95. Washington, D.C., March 1990.

Greer, Joel and Erik Thorbecke (Eds.) Food Poverty and Consumption patterns in Kenya. International Labor Office (ILO), Geneva 1986.

Rosen, Stacey. Agricultural Policy Reform: Issues and Implications for Africa. FAER No. 250. U.S. Department of Agriculture, Economic Research Service, Washington, D.C., September 1993.

U.S. Agency for International Development (USAID). Critical Issues for American Investors in Kenya. Washington, D.C., April 1992.

Nyoro, J. Impacts of Market Reform on Wheat Production, Processing, and Marketing. Paper presented at a Conference entitled Towards 2000: Improving Agricultural Performance, sponsored by Egerton University, PAM/KMDP. Nairobi, Sept. 2, 1995.

LONRHO East Africa Group. House Magazine No. 2, Vol 7.

World Bank. Kenya Poverty Assessment. Population and Human Resources Division, Eastern Africa Department, Africa Region. Report No. 13152-KE, July 1994.

Argwings-Kodhek, G. Toward a Framework for Maize Sector Policy in Kenya: Issues, Options, and Consequences. In Proceedings of the Conference on Market Reforms, Agricultural Production, and Food Security, sponsored by Egerton University, PAM/KMDP. Nairobi, June 1994.

Were Omamo, S. Maize Production, Consumption, and Storage in Kenya under Market Reform: Principal Findings of the PAM/KMDP and Implications for Further Research. Paper presented at a Conference entitled Towards 2000: Improving Agricultural Performance, sponsored by Egerton University, PAM/KMDP. Nairobi, September 21, 1995.

Sasaki, N. Maize Market Liberalization, Seasonal Prices, and Private Sector Storage. Unpubliahed manuscript, University of Arizona, 1995.

Kristjanson, P., et al. Agribusiness Sub-sector Study. Mwaniki Associates, for USAID/Kenya, January 1995.

Government of Kenya. Grain Pricing Study: Cereals Sector Reform Program. Final Report, Vol II, Nairobi, May 1990.

Tanzania

World Bank. World Development Report, 1994. Washington, D.C., June 1994.

World Bank. Tanzania - A Poverty Profile. Report # 12298-TA, December 1993.

World Bank. Tanzania Export Development Strategy. Washington, D.C., July 1995.

World Bank. Tanzania Agriculture. Washington, D.C., December 1994.

United Republic of Tanzania and Food and Agriculture Organization of the United Nations (FAO). Comprehensive Food Security Program. October 1992.

USAID/Tanzania. Finance and Enterprise Development in Tanzania, Vol I, June 1992.

Bryson, Judy et al. A Review of the State of Food and Nutrition in Tanzania and its Programming Implications. USAID/Tanzania, April 1986.

Bevan, David et al. Agriculture and the Policy Environment: Tanzania and Kenya. Organization for Economic Cooperation and Development (OECD), Paris, January 1993.

Bank of Tanzania. Economic and Operations Report for the Year Ended 30th June, 1991.

Collier, P. et al. Labor and Poverty in Rural Tanzania, Clarandon Press, Oxford, UK 1990.

Uganda

USAID. Uganda Country Program Strategic Plan, Volume I, 1992-97.

de Coninck, J. and Roger C. Riddell. Evaluating the Impact of NGO's in Rural Poverty Alleviation - Uganda Country Study. Overseas Development Institute Working Paper No. 51, London, February, 1992.

Inter-Governmental Authority on Drought and Development (IGADD). Food Security Strategy Study - Uganda Country Report.

World Bank. Uganda Agriculture. Washington, D.C., June 1993.

Famine Early Warning System (FEWS) Bulletin, AFR/95-08, October 23, 1995.

USAID. Food Aid and Food Security Policy Paper. Bureau for Program and Policy Coordination, Washington, D.C., February, 1995.

USAID/Uganda. Cooperative Agriculture and Agribusiness Support Project Proposal. Kampala, February, 1988.

Uganda, Republic of. Background to the Budget 1991-92. Ministry of Planning and Economic Development, Kampala, June 1991.

Brett, E., Providing for the Rural Poor: Institutional Decay and Transformation in Uganda. Institute of Development Studies, Research Report No. 23, Sussex, September, 1992.

Makerere Institute of Social Research and Land tenure Center, University of Wisconsin, Land Tenure and Agricultural development in Uganda, January 1989.

Maxwell, Jim and Richard Abbott. Innovative Approaches to Agribusiness Development in Sub-Saharan Africa, Vol. 2: East African Report. AEP-936-5457, August 1995.

Ethiopia

Mulat, T. Agricultural Taxation in Ethiopia. Food and Agriculture Organization of the United Nations (FAO), Rome, 1992.

InterGovernmental Authority on Drought and Development (IGADD). Food Strategy Study: Initiatives to Benefit Food Insecure Small Farm Households in the IGADD Region.

U. S. Agency for International Development/Ethiopia. Ethiopia: Back to the Future. Addis Ababa, June 1993.

Breaking the Cycle of Despair: President Clinton's Initiative on the Horn of Africa. A Concept Paper for Discussion, Washington, D.C., November, 1994.

World Bank. Ethiopia: Business Development Action Plan. Unpublished Report, Washington, D.C.

San Martin, T. and Christopher Hartland-Peel. Ethiopia: Recommendations for Action in the Private Sector. USAID/Ethiopia, January, 1992.

Lirenso, A. Grain Market Reform and Food Security in Ethiopia. Food Research Institute, Stanford University, California, June 15, 1995.

USAID. Food Aid and Food Security Policy Paper. Bureau for Program and Policy Coordination, Washington, D.C. February, 1995.

U.S. Agency for International Development. Ethiopia Fertilizer and Transport Sector Assessment. International Fertilizer Development Center, Alabama, U.S.A, December, 1993.

McCann, J., "The Dry Regions of Ethiopia" in Drought Follows the Plough, Glantz, Michael H. (Ed.), Cambridge University Press, 1994.

International Monetary Fund. Eritrea - Recent Economic Developments. Washington, D.C., November, 28, 1994.

Eritrea

Ministry of Industry and Trade, Eritrea.

World Bank. Eritrea Options and Strategies for Growth. Report 12930-ER, Vols I & II. Washington, D.C., May 12, 1994.

Food and Agriculture Organization of the United Nations (FAO). Eritrea Agricultural Sector Review and Project Identification, Rome, April 22, 1994.

International Monetary Fund (IMF). Recent Economic Developments in Eritrea, November 28, 1994.

Famine Early Warning System (FEWS) Bulletin, AFR/95-09, November 16, 1995.

World Bank and Government of Eritrea estimates.

Dommen, Arthur. Report of the OFDA Mission to Eritrea. Agency for International Development/Bureau for Humanitarian Response/Office of Foreign Disaster Assistance, Washington, D.C., October 1994.

"Elaberet Speaks for Itself." Haddas Eritrea (in Tigrinya), Oct. 15 and 19, 1994.

University of Leeds, Centre for Development Studies. Eritrea 1991. A Needs Assessment Study. Leeds, May 1992.